S. 597

To provide for a comprehensive and balanced national energy policy.

IN THE SENATE OF THE UNITED STATES

March 22, 2001

Mr. Bingaman (for himself, Mr. Daschle, Mr. Akaka, Mr. Baucus, Mr. Breaux, Ms. Cantwell, Mr. Dorgan, Mr. Leahy, Mr. Reid, Mr. Schumer, Mr. Kennedy, Mrs. Murray, Mr. Rockefeller, and Mr. Torricelli) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To provide for a comprehensive and balanced national energy policy.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "Comprehensive and
- 5 Balanced Energy Policy Act of 2001."
- 6 SEC. 2. ORGANIZATION OF ACT INTO DIVISIONS; TABLE OF
- 7 **CONTENTS.**
- 8 (a) Divisions.—This Act is organized into five divi-
- 9 sions as follows:

1	(1) Division A.—National Energy Policy Plan-
2	ning and Coordination.
3	(2) Division B.—Reliable and Diverse Power
4	Generation and Transmission.
5	(3) Division c.—Domestic Oil and Gas Pro-
6	duction and Transportation.
7	(4) Division D.—Diversifying Energy Demand
8	and Improving Efficiency.
9	(5) Division E.—Enhancing Research, Devel-
10	opment, and Training.
11	(b) Table of Contents.—The table of contents for
12	this Act is as follows:
	Sec. 1. Short title. Sec. 2. Table of contents.
	DIVISION A—NATIONAL ENERGY POLICY PLANNING AND COORDINATION
	TITLE I—INTEGRATION OF ENERGY POLICY AND CLIMATE CHANGE POLICY
	Subtitle A—National Commission on Energy and Climate Change
	 Sec. 101. National Commission on Energy and Climate Change. Sec. 102. Duties of the Commission. Sec. 103. Powers of the Commission. Sec. 104. Commission personnel matters. Sec. 105. Termination. Sec. 106. Authorization of appropriations. Sec. 107. Definition of Commission.
	Subtitle B—International Clean Energy Technology Transfer
	Sec. 111. International Clean Energy Technology Transfer.
	TITLE II—REGIONAL COORDINATION ON ENERGY INFRASTRUCTURE
	Sec. 201. Policy on regional coordination. Sec. 202. Federal support for regional coordination.

TITLE III—REGULATORY REVIEWS AND STUDIES

- Sec. 301. Regulatory reviews for new technologies and processes.
- Sec. 302. Review of FERC policies on transmission and wholesale power markets.
- Sec. 303. Study of policies to address volatility in domestic oil and gas investment.
- Sec. 304. Power marketing administration rights-of-way study.
- Sec. 305. Review of natural gas pipeline certification procedures.
- Sec. 306. Streamlining fuel specifications.
- Sec. 307. Study on financing for new technologies.
- Sec. 308. Study on the use of the Strategic Petroleum Reserve.

DIVISION B—RELIABLE AND DIVERSE POWER GENERATION AND TRANSMISSION

TITLE IV—ELECTRIC ENERGY TRANSMISSION RELIABILITY

- See. 401. Electric reliability organization and oversight.
- Sec. 402. Application of antitrust laws.

TITLE V—IMPROVED ELECTRICITY CAPACITY AND ACCESS

- Sec. 501. Universal and affordable service.
- Sec. 502. Public benefits fund.
- Sec. 503. Rural construction grants.
- Sec. 504. Comprehensive Indian energy program.
- Sec. 505. Environmental disclosure to consumers.
- Sec. 506. Consumer protections.
- Sec. 507. Wholesale electricity market data.
- Sec. 508. Wholesale electric energy rates in the western energy market.
- Sec. 509. Natural gas rate ceiling in California.
- Sec. 510. Sale price in bundled natural gas transactions.

TITLE VI—RENEWABLES AND DISTRIBUTED GENERATION

- Sec. 601. Assessment of available renewable energy resources.
- Sec. 602. Federal purchase requirement.
- Sec. 603. Interconnection standards.
- Sec. 604. Net metering.
- Sec. 605. Access to transmission by intermittent generators.

TITLE VII—HYDROELECTRIC RELICENSING

- Sec. 701. Alternative conditions.
- Sec. 702. Disposition of hydroelectric charges.
- Sec. 703. Relicensing study.

TITLE VIII—COAL

Sec. 801. Definitions.

Subtitle A—National Coal-Based Technology Development and Applications Program

- Sec. 811. Cost and performance goals.
- Sec. 812. Study.
- Sec. 813. Technology research and development programs.
- Sec. 814. Authorization of appropriations.

Subtitle B—Power Plant Improvement Initiative

- Sec. 821. Power plant improvement initiative program.
- Sec. 822. Financial assistance.
- Sec. 823. Funding.

TITLE IX—PRICE-ANDERSON ACT REAUTHORIZATION

- Sec. 901. Short title.
- Sec. 902. Indemnification authority.
- Sec. 903. Maximum assessment.
- Sec. 904. DOE liability limit.
- Sec. 905. Incidents outside the United States.
- Sec. 906. Reports.
- Sec. 907. Inflation adjustment.
- Sec. 908. Civil penalties.
- Sec. 909. Effective date.

DIVISION C—DOMESTIC OIL AND GAS PRODUCTION AND TRANSPORTATION

TITLE X—OIL AND GAS PRODUCTION

- Sec. 1001. Outer Continental Shelf Oil and Gas Lease Sale 181.
- Sec. 1002. Federal onshore leasing programs for oil and gas.
- Sec. 1003. Increasing production on State and private lands.

TITLE XI—PIPELINE SAFETY RESEARCH AND DEVELOPMENT

- Sec. 1101. Pipeline integrity research and development.
- Sec. 1102. Pipeline integrity technical advisory committee.
- Sec. 1103. Authorization of appropriations.

DIVISION D—DIVERSIFYING ENERGY DEMAND AND IMPROVING EFFICIENCY

TITLE XII—VEHICLES

- Sec. 1201. Vehicle fuel efficiency.
- Sec. 1202. Increased use of alternative fuels by federal fleets.
- Sec. 1203. Exception to HOV passenger requirements for alternative fuel vehicles.

TITLE XIII—FACILITIES

- Sec. 1301. Federal energy bank.
- Sec. 1302. Incentives for energy-efficient schools.
- Sec. 1303. Voluntary commitments to reduce industrial energy intensity.

DIVISION E—ENHANCING RESEARCH, DEVELOPMENT, AND TRAINING

TITLE XIV—RESEARCH AND DEVELOPMENT PROGRAMS

- Sec. 1401. Short title and findings.
- Sec. 1402. Enhanced energy efficiency research and development.
- Sec. 1403. Enhanced renewable energy research and development.
- Sec. 1404. Enhanced fossil energy research and development.
- Sec. 1405. Enhanced nuclear energy research and development.

Sec. 1406. Enhanced programs in fundamental energy science.

TITLE XV—MANAGEMENT OF DOE SCIENCE AND TECHNOLOGY

PROGRAMS
 Sec. 1501. Merit review. Sec. 1502. Cost sharing. Sec. 1503. Improved coordination and management of science and technology.
TITLE XVI—PERSONNEL AND TRAINING
Sec. 1601. Workforce trends and traineeship grants.Sec. 1602. Training guidelines for electric energy industry personnel.
DIVISION A—NATIONAL ENERGY
POLICY PLANNING AND CO-
ORDINATION
TITLE I—INTEGRATION OF EN-
ERGY POLICY AND CLIMATE
CHANGE POLICY
Subtitle A—National Commission
on Energy and Climate Change
SEC. 101. NATIONAL COMMISSION ON ENERGY AND CLI-
MATE CHANGE.
(a) Establishment.—There is established a Na-
tional Commission on Energy and Climate Change, which
shall be an independent establishment within the executive
branch.

(b) Members.—

- (1) APPOINTMENT.—The Commission shall con-sist of 11 members who shall be appointed by the
- President not later than 30 days after the date of
- enactment of this title.

1	(2) Composition.—The members of the Com-
2	mission shall be—
3	(A) eminent in the field of—
4	(i) energy production, distribution, or
5	conservation,
6	(ii) energy science or technology,
7	(iii) environmental sciences,
8	(iv) global change sciences, or
9	(v) energy economics; and
10	(B) selected to reflect a fair balance among
11	the points of view represented.
12	(3) POLITICAL AFFILIATION.—No more than 6
13	members of the Commission may be members of the
14	same political party as the President. Not less than
15	half of the members of the minority party shall be
16	appointed from among a list of 12 persons nomi-
17	nated by the Democratic Leader of the United
18	States Senate and the Minority Leader of the
19	United States House of Representatives.
20	(4) Chairperson.—The President shall des-
21	ignate a member of the Commission to serve as its
22	chairperson.
23	(5) Term.—Members shall be appointed for the
24	life of the Commission and may be removed by the

1	President only for inefficiency, neglect of duty, or
2	malfeasance in office.
3	(6) Vacancies.—Any vacancy in the Commis-
4	sion shall be filled in the same manner as the origi-
5	nal appointment.
6	SEC. 102. DUTIES OF THE COMMISSION.
7	(a) Energy and Climate Change Study.—
8	(1) In general.—The Commission shall con-
9	duct a study of measures that—
10	(A) could achieve stabilization of green-
11	house gas emissions in the United States—
12	(i) at the 1990 level by not later than
13	2010; and
14	(ii) below the 1990 level by not later
15	than 2020;
16	(B) are consistent with the goals of an
17	overall United States energy and environmental
18	policy; and
19	(C) will lead to the long-term stabilization
20	of greenhouse gas concentrations.
21	(2) Types of measures.—The measures to be
22	studied under paragraph (1) shall include—
23	(A) a variety of cost-effective Federal and
24	State policies, programs, standards, and incen-
25	tives;

1	(B) a domestic or international system
2	that integrates innovative, market-based solu-
3	tions; and
4	(C) participation in other international in-
5	stitutions, or in the support of international ac-
6	tivities, that are established to achieve economi-
7	cally and environmentally sound greenhouse gas
8	stabilization solutions.
9	(b) Recommendations.—The Commission shall de-
10	velop recommendations concerning—
11	(1) the measures described in subsection (a)(1)
12	that the Commission determines to be appropriate
13	for implementation, giving preference to cost-effec-
14	tive, voluntary, and technologically feasible measures
15	that will—
16	(A) produce measurable net reductions in
17	United States emissions that lead toward the
18	stabilization described in subsection $(a)(1)(A)$;
19	and
20	(B) minimize any adverse impacts on the
21	economy of the United States; and
22	(2) the text of legislation and administrative ac-
23	tions that would be necessary to effectuate the meas-
24	ures.
25	(c) Strategy.—

1	(1) IN GENERAL.—Not later than one year
2	after the date of enactment of this title, the Com-
3	mission shall develop and submit to the Congress a
4	United States greenhouse gas management strategy
5	that contains—
6	(A) a detailed statement of the findings
7	and conclusions of the Commission;
8	(B) the recommendations of the Commis-
9	sion for such legislative and administrative ac-
10	tions as the Commission considers appropriate;
11	and
12	(C) appropriate funding recommendations
13	to carry out the recommendations under sub-
14	paragraph (B).
15	(2) REQUIRED RECOMMENDATIONS.—Rec-
16	ommendations under paragraph (1)(B) shall include
17	specific recommendations concerning—
18	(A) the development of—
19	(i) advanced technologies for a full
20	range of energy sources;
21	(ii) enhanced energy efficiency and
22	conservation measures; and
23	(iii) alternative energy technologies
24	and energy sources;

- 1 (B) economically and environmentally
 2 sound emission reduction strategies to stabilize
 3 atmospheric concentrations of greenhouse
 4 gases;
 - (C) such changes in institutional and technological systems as are necessary to adapt to climate change in the near term and the long term; and
 - (D) such review, modification, and enhancement of the scientific and economic research efforts of the United States, and improvements to the data resulting from such research, as are appropriate to improve the accuracy of predictions concerning climate change and economic costs and opportunities.

16 SEC. 103. POWERS OF THE COMMISSION.

- 17 (a) Hearings.—The Commission may hold such 18 hearings, sit and act at such times and places, take such 19 testimony, and receive such evidence as the Commission 20 considers advisable to carry out the duties of the Commis-21 sion under this title.
- 22 (b) Information From Federal Agencies.—The 23 Commission may secure directly from any Federal depart-24 ment or agency such information as the Commission con-25 siders necessary to carry out the duties of the Commission

6

7

8

9

10

11

12

13

14

- 1 under this title. Upon request of the Chairperson of the
- 2 Commission, the head of such department or agency shall
- 3 furnish such information to the Commission.
- 4 (c) Postal Services.—The Commission may use
- 5 the United States mails in the same manner and under
- 6 the same conditions as other departments and agencies of
- 7 the Federal Government.

8 SEC. 104. COMMISSION PERSONNEL MATTERS.

- 9 (a) Compensation of Members.—A member of the
- 10 Commission shall be compensated at a rate equal to the
- 11 daily equivalent of the annual rate of basic pay prescribed
- 12 for level IV of the Executive Schedule under section 5315
- 13 of title 5, United States Code, for each day (including
- 14 travel time) during which the member is engaged in the
- 15 performance of the duties of the Commission.
- 16 (b) Travel Expenses.—A member of the Commis-
- 17 sion shall be allowed travel expenses, including per diem
- 18 in lieu of subsistence, at rates authorized for an employee
- 19 of an agency under subchapter I of chapter 57 of title
- 20 5, United States Code, while away from the home or reg-
- 21 ular place of business of the member in the performance
- 22 of the duties of the Commission.
- 23 (c) Staff.—
- 24 (1) APPOINTMENT.—The Chairperson of the
- 25 Commission may, without regard to the civil service

laws and regulations, appoint and terminate an executive director and such other additional personnel as may be necessary to enable the Commission to perform its duties. The appointment and termination of the executive director shall be subject to confirmation by the Commission.

(2) Compensation.—

7

8

9

10

11

12

13

14

15

16

17

18

19

- (A) IN GENERAL.—Except as provided in subparagraph (B), the Chairperson of the Commission may fix the compensation of the executive director and other personnel without regard to the provisions of chapter 51 and subchapter III of chapter 53 of title 5, United States Code, relating to classification of positions and General Schedule pay rates.
- (B) MAXIMUM RATE OF PAY.—The rate of pay for the executive director and other personnel may not exceed the rate payable for level V of the Executive Schedule under section 5316 of title 5, United States Code.
- 21 (d) Detail of Government Employees.—Upon 22 the request of the Chairperson of the Commission, the 23 head of any Federal department or agency may detail em-24 ployees to the Commission without reimbursement, and

- 1 without interruption or loss of civil service status or privi-
- 2 lege.
- 3 (e) Procurement of Temporary or Intermit-
- 4 TENT SERVICES.—The Chairperson of the Commission
- 5 may procure temporary and intermittent services in ac-
- 6 cordance with section 3109(b) of title 5, United States
- 7 Code, at rates for individuals that do not exceed the daily
- 8 equivalent of the annual rate of basic pay prescribed for
- 9 level V of the Executive Schedule under section 5316 of
- 10 that title.

11 SEC. 105. TERMINATION.

- The Commission shall terminate 90 days after the
- 13 date on which the Commission submits the report under
- 14 section 102(b).

15 SEC. 106. AUTHORIZATION OF APPROPRIATIONS.

- There are authorized to be appropriated such sums
- 17 as may be necessary to carry out this section, which shall
- 18 remain available until expended.

19 SEC. 107. DEFINITION OF COMMISSION.

- For purposes of this title, the term "Commission"
- 21 means the National Commission on Energy and Climate
- 22 Change established by section 101(a).

1	Subtitle B—International Clean
2	Energy Technology Transfer
3	SEC. 111. INTERNATIONAL CLEAN ENERGY TECHNOLOGY
4	TRANSFER.
5	(a) Definitions.—In this section:
6	(1) CLEAN ENERGY TECHNOLOGY.—The term
7	"clean energy technology" means an energy supply
8	or end-use technology that, over its lifecycle and
9	compared to a similar technology already in commer-
10	cial use in developing countries or countries in
11	transition—
12	(A) emits substantially lower levels of pol-
13	lutants or greenhouse gases; and
14	(B) generates substantially smaller or less
15	toxic volumes of solid or liquid waste.
16	(2) Interagency working group.—The term
17	"interagency working group" means the Interagency
18	Working Group on Clean Energy Technology Trans-
19	fer established under subsection (b).
20	(b) Interagency Working Group.—
21	(1) Establishment.—Not later than 180 days
22	after the date of enactment of this section, the Sec-
23	retary of Energy, the Secretary of Commerce, and
24	the Administrator of the U.S. Agency for Inter-
25	national Development shall jointly establish a Inter-

- agency Working Group on Clean Energy Technology
 Transfer. The interagency working group will focus
 on the transfer of clean energy technology to the developing countries and countries in transition that
 are expected to experience, over the next 20 years,
 the most significant growth in energy production
 and associated greenhouse gas emissions.
 - group shall be jointly chaired by representatives appointed by the agency heads under paragraph (1) and shall also include representatives from the Department of State, the Department of Treasury, the Environmental Protection Agency, the Export-Import Bank, the Overseas Private Investment Corporation, the Trade and Development Agency, and other federal agencies as deemed appropriate by all three agency heads under paragraph (1).
 - (3) Duties.—The interagency working group shall—
 - (A) analyze technology, policy, and market opportunities for international development, demonstration, and deployment of clean energy technology;
- 24 (B) investigate issues associated with 25 building capacity to deploy clean energy tech-

1	nology in developing countries and countries in
2	transition, including—
3	(i) energy-sector reform;
4	(ii) creation of open, transparent, and
5	competitive markets for energy tech-
6	nologies;
7	(iii) availability of trained personnel
8	to deploy and maintain the technology; and
9	(iv) demonstration and cost-buydown
10	mechanisms to promote first adoption of
11	the technology;
12	(C) consult with the private sector and
13	other interested groups on the export and de-
14	ployment of clean energy technology;
15	(D) monitor each agency's progress to-
16	wards meeting goals in the 5-year strategic plan
17	submitted to Congress pursuant to the Energy
18	and Water Development Appropriations Act,
19	2001;
20	(E) make recommendations to heads of ap-
21	propriate Federal agencies on ways to stream-
22	line federal programs and policies to improve
23	each agency's role in the international develop-
24	ment, demonstration, and deployment of clean
25	energy technology.

- 1 (c) Federal Support for Clean Energy Tech-
- 2 NOLOGY TRANSFER.—Notwithstanding any other provi-
- 3 sion of law, each federal agency or government corporation
- 4 carrying out an assistance program in support of the ac-
- 5 tivities of United States persons in the environment or en-
- 6 ergy sector of a developing country or country in transi-
- 7 tion shall support, to the maximum extent practicable, the
- 8 transfer of United States clean energy technology as part
- 9 of that program.
- 10 (d) AUTHORIZATION OF APPROPRIATIONS.—There
- 11 are authorized to be appropriated to the departments,
- 12 agencies, and entities of the United States described in
- 13 subsection (b) such sums as may be necessary to support
- 14 the transfer of clean energy technology, consistent with
- 15 the subsidy codes of the World Trade Organization, as
- 16 part of assistance programs carried out by those depart-
- 17 ments, agencies, and entities in support of activities of
- 18 United States persons in the energy sector of a developing
- 19 country or country in transition.

20 TITLE II—REGIONAL COORDINA-

- 21 TION ON ENERGY INFRA-
- 22 **STRUCTURE**
- 23 SEC. 201. POLICY ON REGIONAL COORDINATION.
- 24 (a) STATEMENT OF POLICY.—It is the policy of the
- 25 Federal Government to encourage States to coordinate, on

1	a regional basis, State energy policies to provide reliable
2	and affordable energy services to the public while mini-
3	mizing the impact of providing energy services on commu-
4	nities and the environment.
5	(b) Definition of Energy Services.—For pur-
6	poses of this section, the term "energy services" means—
7	(1) the generation or transmission of electric
8	energy,
9	(2) the transportation, storage, and distribution
10	of crude oil, residual fuel oil, refined petroleum prod-
11	uct, or natural gas, or
12	(3) the reduction in load through increased effi-
13	ciency, conservation, or load control measures.
14	SEC. 202. FEDERAL SUPPORT FOR REGIONAL COORDINA-
15	TION.
16	(a) Technical Assistance.—The Secretary of En-
17	ergy may provide technical assistance to States and re-
18	gional organizations formed by two or more States to as-
19	sist them in coordinating their energy policies on a re-
20	gional basis. Such technical assistance may include assist-
21	ance in—
22	(1) assessing future supply availability and de-
23	mand requirements,
24	(2) planning and siting additional energy infra-
25	structure, including generating facilities, electric

1	transmission facilities, pipelines, refineries, and dis-
2	tributed generation facilities to meet regional needs,
3	(3) identifying and resolving problems in dis-
4	tribution networks,
5	(4) developing plans to respond to surge de-
6	mand or emergency needs, and
7	(5) developing energy efficiency, conservation,
8	and load control programs.
9	(b) Annual Conference on Regional Energy
10	COORDINATION.—
11	(1) Annual conference.—The Secretary of
12	Energy shall convene an annual conference to pro-
13	mote regional coordination on energy policy and in-
14	frastructure issues.
15	(2) Participation.—The Secretary of Energy
16	shall invite appropriate representatives of federal,
17	state, and regional energy organizations, and other
18	interested parties.
19	(3) FEDERAL AGENCY COOPERATION.—The
20	Secretary of Energy shall consult and cooperate with
21	the Secretary of the Interior, the Secretary of Agri-
22	culture, the Secretary of Commerce, the Secretary of
23	the Treasury, the Chairman of the Federal Energy
24	Regulatory Commission, the Administrator of the
25	Environmental Protection Agency, and the Chair-

1	man of the Council on Environmental Quality in the
2	planning and conduct of the conference.
3	(4) Agenda.—The Secretary of Energy, in con-
4	sultation with the officials identified in paragraph
5	(3) and participants identified in paragraph (2),
6	shall establish an agenda for each conference that
7	promotes regional coordination on energy policy and
8	infrastructure issues.
9	(5) RECOMMENDATIONS.—Not later than 60
10	days after the conclusion of each annual conference,
11	the Secretary of Energy shall report to the President
12	and the Congress recommendations arising out of
13	the conference that may improve—
14	(A) regional coordination on energy policy
15	and infrastructure issues, and
16	(B) federal support for regional coordina-
17	tion.
18	TITLE III—REGULATORY
19	REVIEWS AND STUDIES
20	SEC. 301. REGULATORY REVIEWS FOR NEW TECHNOLOGIES
21	AND PROCESSES.
22	(a) REGULATORY REVIEWS.—Not later than one year
23	after the date of enactment of this section and every five
24	years thereafter, each Federal agency shall review its reg-
25	ulations and standards to identify—

1	(1) existing regulations or standards that act as
2	barriers to market entry for emerging energy tech-
3	nologies (including fuel cells, combined heat and
4	power, distributed generation, and small-scale renew-
5	able energy), and
6	(2) actions the agency is taking or could take
7	to—
8	(A) remove barriers to market entry for
9	emerging energy technologies,
10	(B) increase energy efficiency, or
11	(C) encourage the use of new processes to
12	meet energy and environmental goals.
13	(b) Report to Congress.—Not later than 18
14	months after the date of enactment of this section, and
15	every five years thereafter, the Director of the Office of
16	Science and Technology Policy shall report to the Con-
17	gress on the results of the agency reviews conducted under
18	subsection (a).
19	(c) Contents of the Report.—The report shall—
20	(1) identify all regulatory barriers to the devel-
21	opment and commercialization of emerging energy
22	technologies and processes,
23	(2) actions taken, or proposed to be taken, to
24	remove such barriers, and

1	(3) recommendations for changes in laws or
2	regulations that may be needed to—
3	(A) expedite the siting and development of
4	energy production and distribution facilities,
5	(B) encourage the adoption of energy effi-
6	ciency and process improvements, and
7	(C) reduce the environmental impacts of
8	energy facilities through transparent and flexi-
9	ble compliance methods.
10	SEC. 302. REVIEW OF FERC POLICIES ON TRANSMISSION
11	AND WHOLESALE POWER MARKETS.
12	(a) Study.—The Federal Energy Regulatory Com-
13	mission shall reevaluate its regulatory policies on the
14	transmission of electric energy and wholesale power rates
15	(b) Scope of Study.—The study shall—
16	(1) reevaluate the methods and models for de-
17	termining market power, taking into account the ex-
18	perience in the Western power grid,
19	(2) reevaluate the adequacy and appropriate-
20	ness of the Commission's definition of "market
21	power" as applied to wholesale power markets and
22	the transmission grid,
23	(3) analyze the impact of wholesale price vola-
24	tility on power markets and the effect on the na-

- tional interest in a reliable and affordable electricity
 system,
- 4 transmission, specifically identifying policy changes 5 that may be needed to ensure adequate construction 6 of transmission capacity and operating procedures to 7 ensure the most efficient use of the transmission 8 grid, and
- 9 (5) determine the adequacy of the Commission's 10 voluntary approach to forming regional transmission 11 organizations.
- 12 (c) Report.—The Commission shall report its find-
- 13 ings to the Congress not later than 120 days after the
- 14 date of the enactment of this section.
- 15 SEC. 303. STUDY OF POLICIES TO ADDRESS VOLATILITY IN
- 16 DOMESTIC OIL AND GAS INVESTMENT.
- 17 (a) Study.—The Secretary of Energy, in close co-
- 18 ordination with the Secretary of the Interior, the Sec-
- 19 retary of Commerce, the Secretary of Treasury, and the
- 20 Interstate Oil and Gas Compact Commission, shall evalu-
- 21 ate the impact existing federal and state tax and royalty
- 22 policies have on the development of domestic oil and gas
- 23 resources.
- (b) Scope of Study.—The study under subsection
- 25 (a) shall analyze—

- 1 (1) the impact on development and drilling of 2 different price scenarios for oil and natural gas;
 - (2) the impact of the Alternative Minimum Tax and fixed royalty rates on maintaining development drilling during periods of depressed prices;
 - (3) the effect of Federal and state tax and royalty policies on investment in different geological and developmental circumstances, including but not limited to deepwater environments, subsalt formations, well-depth environments, coalbed methane and other unconventional gas formations, and Arctic conditions; and
 - (4) compare those policies with tax and royalty regimes in other countries with similar geological, developmental and infrastructure conditions.
- (c) Upon completion of the study under subsection (a), a report describing the findings and recommendations for policy changes shall be provided to the Congress and the Governors of the member states of the Interstate Oil and Gas Compact Commission. The recommendations should ensure that the public interest in receiving the economic benefits of tax and royalty revenues is balanced
- 23 against the need for revised policies to—
- (1) maintain adequate natural gas development
 drilling during periods of low world oil prices;

5

6

7

8

9

10

11

12

13

14

1	(2) ameliorate the boom-bust cycles negatively
2	affecting the oil and gas service industry; and
3	(3) ensure a consistent level of domestic activity
4	to encourage the education and retention of a tech-
5	nical workforce.
6	(d) The study under subsection (a) shall be completed
7	not later than 240 days after the date of enactment of
8	this section. The report required in (b) shall be trans-
9	mitted to Congress not later than 60 days following the
10	completion of the study.
11	SEC. 304. POWER MARKETING ADMINISTRATION RIGHTS-
12	OF-WAY STUDY.
13	The Secretary of Energy shall conduct a study of the
14	rights-of-way owned by the Federal power marketing
15	agencies and the Tennessee Valley Authority to determine
16	their location and whether they can be used by pipelines
17	or other transmission services where new capacity is need-
18	ed. Not later than one year after the date of enactment
19	of this section, the Secretary shall transmit a report to
20	Congress summarizing the results of the study.
21	SEC. 305. REVIEW OF NATURAL GAS PIPELINE CERTIFI-
22	CATION PROCEDURES.
23	(a) FERC REVIEW.—The Federal Energy Regu-
24	latory Commission shall, in consultation with other appro-

- 1 of policies, procedures, and regulations for the certifi-
- 2 cation of natural gas pipelines to determine how to reduce
- 3 the cost and time of obtaining a certificate. The Commis-
- 4 sion shall report its findings and any recommendations for
- 5 legislation to the Committee on Energy and Natural Re-
- 6 sources of the United States Senate and the Committee
- 7 on Energy and Commerce of the United States House of
- 8 Representatives not later than 6 months after the date
- 9 of enactment of this section.
- 10 (b) Interagency Review.—The Chairman of the
- 11 Council on Environmental Quality, in coordination with
- 12 the Federal Energy Regulatory Commission, shall estab-
- 13 lish an interagency task force to develop an interagency
- 14 memorandum of understanding to expedite the environ-
- 15 mental review and permitting of natural gas pipeline
- 16 projects.
- 17 (c) Membership of Interagency Task Force.—
- 18 The task force shall consist of—
- 19 (1) the Chairman of the Council on Environ-
- 20 mental Quality, who shall serve as the Chairman of
- 21 the interagency task force,
- 22 (2) the Chairman of the Federal Energy Regu-
- 23 latory Commission,
- 24 (3) the Director of the Bureau of Land Man-
- agement,

1	(4) the Director of the U.S. Fish and Wildlife
2	Service,
3	(5) the Commanding General, U.S. Army Corps
4	of Engineers,
5	(6) the Chief of the Forest Service,
6	(7) the Administrator of the Environmental
7	Protection Agency,
8	(8) the Chairman of the Advisory Council on
9	Historic Preservation, and
10	(9) and the heads of such other agencies as the
11	Chairman of the Council on Environmental Quality
12	and the Chairman of the Federal Energy Regulatory
13	Commission deem appropriate.
14	(d) Memorandum of Understanding.—The agen-
15	cies represented by the members of the interagency task
16	force shall enter into the memorandum of understanding
17	not later than one year after the date of the enactment
18	of this section.
19	SEC. 306. STREAMLINING FUEL SPECIFICATIONS.
20	(a) Report.—Not later than nine months after the
21	date of enactment of this title, the Administrator of the
22	Environmental Protection Agency and the Secretary of
23	Energy shall jointly report to the Congress on the tech-
24	nical and economic feasibility of developing national or re-

- 1 gional vehicle fuel specifications for the contiguous United
- 2 States that would—
- 3 (1) enhance flexibility in the distribution of
- 4 fuels,
- 5 (2) reduce price volatility and costs to con-
- 6 sumers and producers, and
- 7 (3) meet local, regional, and national air quality
- 8 requirements and goals.
- 9 (b) Recommendations.—The report shall include
- 10 recommendations for appropriate changes to existing laws
- 11 and regulations.
- 12 (c) Consultation.—The Administrator and the
- 13 Secretary shall consult with the Governors of the several
- 14 States, automobile manufacturers, vehicle fuel producers
- 15 and distributors, and the public in the preparation of the
- 16 report.
- 17 SEC. 307. STUDY OF FINANCING FOR NEW TECHNOLOGIES.
- 18 (a) Independent Assessment.—The Secretary of
- 19 Energy shall commission an independent assessment of in-
- 20 novative financing techniques to facilitate construction of
- 21 new electricity supply technologies that might not other-
- 22 wise be built in a competitive electricity market.
- 23 (b) Conduct of the Assessment.—The Secretary
- 24 shall retain an independent contractor with proven exper-

- 1 tise in financing large capital projects or in financial serv-
- 2 ices consulting to conduct the assessment.
- 3 (c) Content of the Assessment.—The assess-
- 4 ment shall include a comprehensive examination of all
- 5 available techniques to safeguard private investors against
- 6 risks (including both market-based and government-im-
- 7 posed risks) that are beyond the control of the investors.
- 8 Such techniques may include Federal loan guarantees,
- 9 Federal price guarantees, special tax considerations, and
- 10 direct Federal investment.
- 11 (d) Report.—The Secretary shall submit the results
- 12 of the independent assessment to the Congress not later
- 13 than 9 months after the date of enactment of this section.
- 14 SEC. 308. STUDY ON THE USE OF THE STRATEGIC PETRO-
- 15 LEUM RESERVE.
- 16 (a) Report.—The Secretary of Energy shall report
- 17 to the President and to the Committee on Energy and
- 18 Natural Resources of the United States Senate and the
- 19 Committee on Energy and Commerce of the United States
- 20 House of Representatives, not later than 6 months after
- 21 the date of enactment of this title, on whether section 161
- 22 of the Energy Policy and Conservation Act (42 U.S.C.
- 23 6241) should be amended to give the Secretary greater
- 24 flexibility to drawdown and distribute the Reserve to miti-
- 25 gate price volatility or regional supply shortages.

1	(b) Contents of the Report.—The Secretary
2	shall include in the report—
3	(1) an assessment of how extreme market con-
4	ditions in the past (including, in particular, the con-
5	ditions between July 1990 and February 1991) may
6	have been mitigated by more timely use of the Re-
7	serve, and
8	(2) specific recommendations for any changes in
9	the existing law the Secretary determines to be nec-
10	essary or desirable and a statement of the reasons
11	for any such changes.
12	DIVISION B—DIVERSE AND RELI-
13	ABLE POWER GENERATION
13 14	ABLE POWER GENERATION AND TRANSMISSION
14	AND TRANSMISSION
14 15 16	AND TRANSMISSION TITLE IV—ELECTRIC ENERGY
14 15	AND TRANSMISSION TITLE IV—ELECTRIC ENERGY TRANSMISSION RELIABILITY
14 15 16 17	AND TRANSMISSION TITLE IV—ELECTRIC ENERGY TRANSMISSION RELIABILITY SEC. 401. ELECTRIC RELIABILITY ORGANIZATION AND
14 15 16 17 18	AND TRANSMISSION TITLE IV—ELECTRIC ENERGY TRANSMISSION RELIABILITY SEC. 401. ELECTRIC RELIABILITY ORGANIZATION AND OVERSIGHT.
14 15 16 17 18	AND TRANSMISSION TITLE IV—ELECTRIC ENERGY TRANSMISSION RELIABILITY SEC. 401. ELECTRIC RELIABILITY ORGANIZATION AND OVERSIGHT. (a) IN GENERAL.—Part II of the Federal Power Act
14 15 16 17 18 19 20	AND TRANSMISSION TITLE IV—ELECTRIC ENERGY TRANSMISSION RELIABILITY SEC. 401. ELECTRIC RELIABILITY ORGANIZATION AND OVERSIGHT. (a) IN GENERAL.—Part II of the Federal Power Act (16 U.S.C. 824–824m) is amended by adding at the end
14 15 16 17 18 19 20 21	AND TRANSMISSION TITLE IV—ELECTRIC ENERGY TRANSMISSION RELIABILITY SEC. 401. ELECTRIC RELIABILITY ORGANIZATION AND OVERSIGHT. (a) IN GENERAL.—Part II of the Federal Power Act (16 U.S.C. 824–824m) is amended by adding at the end the following:

- 1 "(1) AFFILIATED REGIONAL RELIABILITY ENTI-2 TY.—The term 'affiliated regional reliability entity' 3 means an entity delegated authority under the provi-4 sions of subsection (h).
 - "(2) Bulk power system.—The term 'bulk power system' means all facilities and control systems necessary for operating an interconnected transmission grid (or any portion thereof, including high-voltage transmission lines; substations; control centers; communications; data, and operations planning facilities; and the output of generating units necessary to maintain transmission system reliability.
 - "(3) ELECTRIC RELIABILITY ORGANIZATION, OR ORGANIZATION.—The term 'Electric Reliability Organization' or 'Organization' means the organization approved by the Commission under subsection (d)(4).
 - "(4) Entity rule.—The term 'entity rule' means a rule adopted by an affiliated regional reliability entity for a specific region and designed to implement or enforce one or more Organization Standards. An entity rule shall be approved by the organization and once approved, shall be treated as an Organization Standard.

- 1 "(5) INDUSTRY SECTOR.—The term 'industry 2 sector' means a group of users of the bulk power 3 system with substantially similar commercial inter-4 ests, as determined by the Board of the Electric Re-5 liability Organization.
 - "(6) Interconnection.—The term 'interconnection' means a geographic area in which the operation of bulk power system components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the interconnection to maintain safe and reliable operation of the facilities within their control.
 - "(7) Organization Standard means a policy or standard duly adopted by the Electric Reliability Organization to provide for the reliable operation of a bulk power system.
 - "(8) Public interest group' means any nonprofit private or public organization that has an interest in the activities of the Electric Reliability Organization, including, but not limited to, ratepayer advocates, environmental groups, and State and local government

organizations that regulate market participants and promulgate government policy.

"(9) Variance.—The term 'variance' means an exception or variance from the requirements of an Organization Standard (including a proposal for an Organization Standard where there is no Organization Standard) that is adopted by an affiliated regional reliability entity and applicable to all or a part of the region for which the affiliated regional reliability entity is responsible. A variance shall be approved by the organization and once approved, shall be treated as an Organization Standard.

"(10) System operator.—The term 'system operator' means any entity that operates or is responsible for the operation of a bulk power system, including but not limited to a control area operator, an independent system operator, a regional transmission organization, a transmission company, a transmission system operator, or a regional security coordinator.

"(11) User of the bulk power system' means any entity that sells, purchases, or transmits electric power over a bulk power system, or that owns, operates, or maintains facilities or control systems that

are part of a bulk power system, or that is a system
 operator.

"(b) Commission Authority.—

- "(1) Within the United States, the Commission shall have jurisdiction over the Electric Reliability Organization, all affiliated regional reliability entities, all system operators, and all users of the bulk-power system, for purposes of approving and enforcing compliance with the requirements of this section.
- "(2) The Commission may, by rule, define any other term used in this section, provided such definition is consistent with the definitions in, and the purpose and intent of, this Act.
- "(3) Not later than 90 days after the date of enactment of this section, the Commission shall issue a proposed rule for implementing the requirements of this section. The Commission shall provide notice and opportunity for comment on the proposed rule. The Commission shall issue a final rule under this subsection within 180 days after the date of enactment of this section.
- "(4) Nothing in this section shall be construed as limiting or impairing any authority of the Commission under any other provision of this Act, including its exclusive authority to determine rates,

- 1 terms, and conditions of transmission services sub-
- 2 ject to its jurisdiction.
- 3 "(c) Existing Reliability Standards.—Fol-
- 4 lowing enactment of this section, and prior to the approval
- 5 of an organization under subsection (d), any entity, in-
- 6 cluding the North American Electric Reliability Council
- 7 and its member regional reliability councils, may file any
- 8 reliability standard, guidance, or practice that such entity
- 9 would propose to be made mandatory and enforceable. The
- 10 Commission, after allowing an opportunity to submit com-
- 11 ments, may approve any such proposed mandatory stand-
- 12 ard, guidance, or practice, or any amendment thereto, if
- 13 it finds that the standard, guidance, or practice, or
- 14 amendment is just, reasonable, not unduly discriminatory
- 15 or preferential, and in the public interest. The Commission
- 16 may, without further proceeding or finding, grant its ap-
- 17 proval to any standard, guidance, or practice for which
- 18 no substantive objections are filed in the comment period.
- 19 Filed standards, guidances, or practices, including any
- 20 amendments thereto, shall be mandatory and applicable
- 21 according to their terms following approval by the Com-
- 22 mission and shall remain in effect until—
- "(1) withdrawn, disapproved, or superseded by
- an Organization Standard, issued or approved by the

- Electric Reliability Organization and made effective
 by the Commission under subsection (e); or
 - "(2) disapproved by the Commission if, upon complaint or upon its own motion and after notice and an opportunity for comment, the Commission finds the standard, guidance, or practice unjust, unreasonable, unduly discriminatory, or preferential or not in the public interest. Standards, guidances, or practices in effect pursuant to the provisions of this subsection shall be enforceable by the Commission. "(d) Organization Approval.—
 - "(1) Following the issuance of a final Commission rule under subsection (b)(3), an entity may submit an application to the Commission for approval as the Electric Reliability Organization. The applicant shall specify in its application its governance and procedures, as well as its funding mechanism and initial funding requirements.
 - "(2) The Commission shall provide public notice of the application and afford interested parties an opportunity to comment.
 - "(3) The Commission shall approve the application if the Commission determines that the applicant—

1	"(A) has the ability to develop, implement,
2	and enforce standards that provide for an ade-
3	quate level of reliability of the bulk power sys-
4	tem;
5	"(B) permits voluntary membership to any

- "(B) permits voluntary membership to any user of the bulk power system or public interest group;
- "(C) assures fair representation of its members in the selection of its directors and fair management of its affairs, taking into account the need for efficiency and effectiveness in decisionmaking and operations and the requirements for technical competency in the development of Organization Standards and the exercise of oversight of bulk power system reliability;
- "(D) assures that no two industry sectors have the ability to control, and no one industry sector has the ability to veto, the Electric Reliability Organization's discharge of its responsibilities (including actions by committees recommending standards to the board or other board actions to implement and enforce standards);

1	"(E) provides for governance by a board
2	wholly comprised of independent directors;
3	"(F) provides a funding mechanism and
4	requirements that are just, reasonable, and not
5	unduly discriminatory or preferential and are in
6	the public interest, and which satisfy the re-
7	quirements of subsection (l) ;
8	"(G) establishes procedures for develop-
9	ment of Organization Standards that provide
10	reasonable notice and opportunity for public
11	comment, taking into account the need for effi-
12	ciency and effectiveness in decisionmaking and
13	operations and the requirements for technical
14	competency in the development of Organization
15	Standards, and which standards development
16	process has the following attributes—
17	"(i) openness;
18	"(ii) balance of interests; and
19	"(iii) due process, except that the pro-
20	cedures may include alternative procedures
21	for emergencies;
22	"(H) establishes fair and impartial proce-
23	dures for implementation and enforcement of
24	Organization Standards, either directly or
25	through delegation to an affiliated regional reli-

1	ability entity, including the imposition of pen-
2	alties, limitations on activities, functions, or op-
3	erations, or other appropriate sanctions;
4	"(I) establishes procedures for notice and
5	opportunity for public observation of all meet-
6	ings, except that the procedures for public ob-
7	servation may include alternative procedures for
8	emergencies or for the discussion of information
9	the directors determine should take place in
10	closed session, such as litigation, personnel ac-
11	tions, or commercially sensitive information;
12	"(J) provides for the consideration of rec-
13	ommendations of States and State commissions;
14	and
15	"(K) addresses other matters that the
16	Commission may deem necessary or appropriate
17	to ensure that the procedures, governance, and
18	funding of the Electric Reliability Organization
19	are just, reasonable, not unduly discriminatory
20	or preferential, and are in the public interest.
21	"(4) The Commission shall approve only one
22	Electric Reliability Organization. If the Commission
23	receives two or more timely applications that satisfy
24	the requirements of this subsection, the Commission

1	shall approve only the application it concludes will
2	best implement the provisions of this section.
3	"(e) Establishment of and Modifications to
4	Organization Standards.—
5	"(1) The Electric Reliability Organization shall
6	file with the Commission any new or modified orga-
7	nization standards, including any variances or entity
8	rules, and the Commission shall follow the proce-
9	dures under paragraph (2) for review of that filing.
10	"(2) Submissions under paragraph (1) shall
11	include—
12	"(A) a concise statement of the purpose of
13	the proposal, and
14	"(B) a record of any proceedings con-
15	ducted with respect to such proposal.
16	The Commission shall provide notice of the filing of
17	such proposal and afford interested entities 30 days
18	to submit comments. The Commission, after taking
19	into consideration any submitted comments, shall
20	approve or disapprove such proposal not later than
21	60 days after the deadline for the submission of
22	comments, except that the Commission may extend
23	the 60–day period for an additional 90 days for good
24	cause, and except further that if the Commission
25	does not act to approve or disapprove a proposal

within the foregoing periods, the proposal shall go into effect subject to its terms, without prejudice to the authority of the Commission thereafter to modify the proposal in accordance with the standards and requirements of this section. Proposals approved by the Commission shall take effect according to their terms but not earlier than 30 days after the effective date of the Commission's order, except as provided in paragraph (3) of this subsection.

"(3)(A) In the exercise of its review responsibilities under this subsection, the Commission shall give due weight to the technical expertise of the Electric Reliability Organization with respect to the content of a new or modified organization standard, but shall not defer to the organization with respect to the effect of the standard on competition. The Commission shall approve a proposed new or modified organization standard if it determines the proposal to be just, reasonable, not unduly discriminatory or preferential, and in the public interest.

"(B) An existing or proposed organization standard which is disapproved in whole or in part by the Commission shall be remanded to the Electric Reliability Organization for further consideration.

"(C) The Commission, on its own motion or upon complaint, may direct the Electric Reliability Organization to develop an organization standard, including modification to an existing organization standard, addressing a specific matter by a date certain if the Commission considers such new or modified organization standard necessary or appropriate to further the purposes of this section. The Electric Reliability Organization shall file any such new or modified organization standard in accordance with this subsection.

"(D) An affiliated regional reliability entity may propose a variance or entity rule to the Electric Reliability Organization. The affiliated regional reliability entity may request that the Electric Reliability Organization expedite consideration of the proposal, and may file a notice of such request with the Commission, if expedited consideration is necessary to provide for bulk-power system reliability. If the Electric Reliability Organization fails to adopt the variance or entity rule, either in whole or in part, the affiliated regional reliability entity may request that the Commission review such action. If the Commission determines, after its review of such a request, that the action of the Electric Reliability

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Organization did not conform to the applicable standards and procedures approved by the Commission, or if the Commission determines that the variance or entity rule is just, reasonable, not unduly discriminatory or preferential, and in the public interest, and that the Electric Reliability Organization has unreasonably rejected the proposed variance or entity rule, then the Commission may remand the proposed variance or entity rule for further consideration by the Electric Reliability Organization or may direct the Electric Reliability Organization or the affiliated regional reliability entity to develop a variance or entity rule consistent with that requested by the affiliated regional reliability entity. Any such variance or entity rule proposed by an affiliated regional reliability entity shall be submitted to the Electric Reliability Organization for review and filing with the Commission in accordance with the procedures specified in this subsection.

"(E) Notwithstanding any other provision of this subsection, a proposed organization standard or amendment shall take effect according to its terms if the Electric Reliability Organization determines that an emergency exists requiring that such proposed organization standard or amendment take ef-

1 fect without notice or comment. The Electric Reli-2 ability Organization shall notify the Commission im-3 mediately following such determination and shall file such emergency organization standard or amend-5 ment with the Commission not later than 5 days fol-6 lowing such determination and shall include in such 7 filing an explanation of the need for such emergency 8 standard. Subsequently, the Commission shall pro-9 vide notice of the organization standard or amend-10 ment for comment, and shall follow the procedures 11 set out in paragraphs (2) and (3) for review of the 12 new or modified organization standard. Any such or-13 ganization standard that has gone into effect shall 14 remain in effect unless and until suspended or dis-15 approved by the Commission. If the Commission de-16 termines at any time that the emergency organiza-17 tion standard or amendment is not necessary, the 18 Commission may suspend such emergency organiza-19 tion standard or amendment.

- "(4) All users of the bulk power system shall comply with any organization standard that takes effect under this section.
- 23 "(f) Coordination With Canada and Mexico.—
- 24 The Electric Reliability Organization shall take all appro-
- 25 priate steps to gain recognition in Canada and Mexico.

20

21

- 1 The United States shall use its best efforts to enter into
- 2 international agreements with the appropriate govern-
- 3 ments of Canada and Mexico to provide for effective com-
- 4 pliance with organization standards and to provide for the
- 5 effectiveness of the Electric Reliability Organization in
- 6 carrying out its mission and responsibilities. All actions
- 7 taken by the Electric Reliability Organization, any affili-
- 8 ated regional entity, and the Commission shall be con-
- 9 sistent with the provisions of such international agree-
- 10 ments.
- 11 "(g) Changes in Procedures, Governance, or
- 12 Funding.—
- 13 "(1) The Electric Reliability Organization shall
- 14 file with the Commission any proposed change in its
- procedures, governance, or funding, or any changes
- in the affiliated regional reliability entity's proce-
- dures, governance, or funding relating to delegated
- functions, and shall include with the filing an expla-
- 19 nation of the basis and purpose for the change.
- 20 "(2) A proposed procedural change may take
- effect 90 days after filing with the Commission if
- the change constitutes a statement of policy, prac-
- 23 tice, or interpretation with respect to the meaning or
- enforcement of an existing procedure. Otherwise, a
- proposed procedural change shall take effect only

- upon a finding by the Commission, after notice and opportunity for comments, that the change is just, reasonable, not unduly discriminatory or preferential, is in the public interest, and satisfies the requirements of subsection (d)(4).
 - "(3) A change in governance or funding shall not take effect unless the Commission finds that the change is just, reasonable, not unduly discriminatory or preferential, in the public interest, and satisfies the requirements of subsection (d)(4).
 - "(4) The Commission, upon complaint or upon its own motion, may require the Electric Reliability Organization to amend the procedures, governance, or funding if the Commission determines that the amendment is necessary to meet the requirements of this section. The Electric Reliability Organization shall file the amendment in accordance with paragraph (1) of this subsection.

"(h) Delegations of Authority.—

"(1) The Electric Reliability Organization shall, upon request by an entity, enter into an agreement with such entity for the delegation of authority to implement and enforce compliance with organization standards in a specified geographic area if the organization finds that the entity requesting the delega-

tion satisfies the requirements of subparagraphs (A), (B), (C), (D), (F), (J), and (K) of subsection (d)(4), and if the delegation promotes the effective and efficient implementation and administration of bulk power system reliability. The Electric Reliability Or-ganization may enter into an agreement to delegate to the entity any other authority, except that the Electric Reliability Organization shall reserve the right to set and approve standards for bulk power system reliability.

"(2) The Electric Reliability Organization shall file with the Commission any agreement entered into under this subsection and any information the Commission requires with respect to the affiliated regional reliability entity to which authority is to be delegated. The Commission shall approve the agreement, following public notice and an opportunity for comment, if it finds that the agreement meets the requirements of paragraph (1), and is just, reasonable, not unduly discriminatory or preferential, and is in the public interest. A proposed delegation agreement with an affiliated regional reliability entity organized on an interconnection-wide basis shall be rebuttably presumed by the Commission to promote the effective and efficient implementation and

administration of bulk power system reliability. No delegation by the Electric Reliability Organization shall be valid unless approved by the Commission.

- "(3)(A) A delegation agreement entered into under this subsection shall specify the procedures for an affiliated regional reliability entity to propose entity rules or variances for review by the Electric Reliability Organization. With respect to any such proposal that would apply on an interconnection-wide basis, the Electric Reliability Organization shall presume such proposal valid if made by an interconnection-wide affiliated regional reliability entity unless the Electric Reliability Organization makes a written finding that the proposal—
 - "(i) was not developed in a fair and open process that provided an opportunity for all interested parties to participate;
 - "(ii) has a significant adverse impact on reliability or commerce in other interconnections;
 - "(iii) fails to provide a level of reliability of the bulk-power system within the interconnection such that it would constitute a serious and substantial threat to public health, safety, welfare, or national security; or

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1	"(iv) creates a serious and substantial bur-
2	den on competitive markets within the inter-
3	connection that is not necessary for reliability.
4	"(B) With respect to any such proposal that
5	would apply only to part of an interconnection, the
6	Electric Reliability Organization shall find such pro-
7	posal valid if the affiliated regional reliability entity
8	or entities making the proposal demonstrate that
9	it—
10	"(i) was developed in a fair and open proc-
11	ess that provided an opportunity for all inter-
12	ested parties to participate;
13	"(ii) would not have an adverse impact on
14	commerce that is not necessary for reliability;
15	"(iii) provides a level of bulk power system
16	reliability adequate to protect public health,
17	safety, welfare, and national security, and
18	would not have a significant adverse impact on
19	reliability; and
20	"(iv) in the case of a variance, is based on
21	legitimate differences between regions or be-
22	tween subregions within the affiliated regional
23	reliability entity's geographic area.
24	The Electric Reliability Organization shall approve
25	or disapprove such proposal within 120 days, or the

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

proposal shall be deemed approved. Following approval of any such proposal under this paragraph, the Electric Reliability Organization shall seek Commission approval pursuant to the procedures prescribed under subsection (e)(3). Affiliated regional reliability entities may not make requests for approval directly to the Commission except pursuant to subsection (e)(3)(D).

"(4) If an affiliated regional reliability entity requests, consistent with paragraph (1) of this subsection, that the Electric Reliability Organization delegate authority to it, but is unable within 180 days to reach agreement with the Electric Reliability Organization with respect to such requested delegation, such entity may seek relief from the Commission. If, following notice and opportunity for comment, the Commission determines that a delegation to the entity would meet the requirements of paragraph (1) above, and that the delegation would be just, reasonable, not unduly discriminatory or preferential, and in the public interest, and that the Electric Reliability Organization has unreasonably withheld such delegation, the Commission may, by order, direct the Electric Reliability Organization to make such delegation.

"(5)(A) The Commission may, upon its own motion or upon complaint, and with notice to the appropriate affiliated regional reliability entity or entities, direct the Electric Reliability Organization to propose a modification to an agreement entered into under this subsection if the Commission determines that—

- "(i) the affiliated regional reliability entity no longer has the capacity to carry out effectively or efficiently its implementation or enforcement responsibilities under that agreement, has failed to meet its obligations under that agreement, or has violated any provision of this section;
- "(ii) the rules, practices, or procedures of the affiliated regional reliability entity no longer provide for fair and impartial discharge of its implementation or enforcement responsibilities under the agreement;
- "(iii) the geographic boundary of a transmission entity approved by the Commission is not wholly within the boundary of an affiliated regional reliability entity and such difference is inconsistent with the effective and efficient im-

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

plementation and administration of bulk power
system reliability; or

"(iv) the agreement is inconsistent with another delegation agreement as a result of actions taken under paragraph (4) of this subsection.

"(B) Following an order of the Commission issued under subparagraph (A), the Commission may suspend the affected agreement if the Electric Reliability Organization or the affiliated regional reliability entity does not propose an appropriate and timely modification. If the agreement is suspended, the Electric Reliability Organization shall assume the previously delegated responsibilities. The Commission shall allow the Electric Reliability Organization and the affiliated regional reliability entity an opportunity to appeal the suspension.

"(i) Organization Membership.—Every system operator shall be required to be a member of the Electric Reliability Organization and shall be required also to be a member of any affiliated regional reliability entity operating under an agreement effective pursuant to subsection (h) applicable to the region in which the system operates or is responsible for the operation of bulk power system facilities.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

"(j) Injunctions and Disciplinary Actions.—

"(1) Consistent with the range of actions ap-Commission proved by the under subsection (d)(4)(H), the Electric Reliability Organization may impose a penalty, limitation of activities, functions, operations, or other disciplinary action the Electric Reliability Organization finds appropriate against a user of the bulk power system if the Electric Reliability Organization, after notice and an opportunity for interested parties to be heard, issues a finding in writing that the user of the bulk-power system has violated an organization standard. The Electric Reliability Organization shall immediately notify the Commission of any disciplinary action imposed with respect to an act or failure to act of a user of the bulk-power system that affected or threatened to affect bulk power system facilities located in the United States, and the sanctioned party shall have the right to seek modification or rescission of such disciplinary action by the Commission. If the organization finds it necessary to prevent a serious threat to reliability, the organization may seek injunctive relief in a Federal court in the district in which the affected facilities are located.

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

"(2) A disciplinary action taken under paragraph (1) may take effect not earlier than the 30th day after the Electric Reliability Organization files with the Commission its written finding and record of proceedings before the Electric Reliability Organization and the Commission posts its written finding, unless the Commission, on its own motion or upon application by the user of the bulk power system which is the subject of the action, suspends the action. The action shall remain in effect or remain suspended unless and until the Commission, after notice and opportunity for hearing, affirms, sets aside, modifies, or reinstates the action, but the Commission shall conduct such hearing under procedures established to ensure expedited consideration of the action taken.

"(3) The Commission, on its own motion or on complaint, may order compliance with an organization standard and may impose a penalty, limitation of activities, functions, or operations, or take such other disciplinary action as the Commission finds appropriate, against a user of the bulk power system with respect to actions affecting or threatening to affect bulk power system facilities located in the United States if the Commission finds, after notice

- and opportunity for a hearing, that the user of the
- 2 bulk power system has violated or threatens to vio-
- 3 late an organization standard.
- 4 "(4) The Commission may take such action as
- 5 is necessary against the Electric Reliability Organi-
- 6 zation or an affiliated regional reliability entity to
- 7 assure compliance with an organization standard, or
- 8 any Commission order affecting the Electric Reli-
- 9 ability Organization or an affiliated regional reli-
- ability entity.
- 11 "(k) Reliability Reports.—The Electric Reli-
- 12 ability Organization shall conduct periodic assessments of
- 13 the reliability and adequacy of the interconnected bulk
- 14 power system in North America and shall report annually
- 15 to the Secretary of Energy and the Commission its find-
- 16 ings and recommendations for monitoring or improving
- 17 system reliability and adequacy.
- 18 "(1) Assessment and Recovery of Certain
- 19 Costs.—The reasonable costs of the Electric Reliability
- 20 Organization, and the reasonable costs of each affiliated
- 21 regional reliability entity that are related to implementa-
- 22 tion and enforcement of organization standards or other
- 23 requirements contained in a delegation agreement ap-
- 24 proved under subsection (h), shall be assessed by the Elec-
- 25 tric Reliability Organization and each affiliated regional

- 1 reliability entity, respectively, taking into account the rela-
- 2 tionship of costs to each region and based on an allocation
- 3 that reflects an equitable sharing of the costs among all
- 4 end users. The Commission shall provide by rule for the
- 5 review of such costs and allocations, pursuant to the
- 6 standards in this subsection and subsection (d)(4)(F).
- 7 "(m) Savings Provisions.—
- 8 "(1) The Electric Reliability Organization shall 9 have authority to develop, implement and enforce 10 compliance with standards for the reliable operation 11 of only the bulk power system.
 - "(2) This section does not provide the Electric Reliability Organization or the Commission with the authority to set and enforce compliance with standards for adequacy or safety of electric facilities or services.
 - "(3) Nothing in this section shall be construed to preempt any authority of any State to take action to ensure the safety, adequacy, and reliability of electric service within that State, as long as such action is not inconsistent with any Organization Standard.
 - "(4) Within 90 days of the application of the Electric Reliability Organization or other affected party, the Commission shall issue a final order de-

13

14

15

16

17

18

19

20

21

22

23

24

- 1 termining whether a State action is inconsistent with
- an Organization Standard, after notice and oppor-
- 3 tunity for comment, taking into consideration any
- 4 recommendations of the Electric Reliability Organi-
- 5 zation.
- 6 "(5) The Commission, after consultation with
- 7 the Electric Reliability Organization, may stay the
- 8 effectiveness of any State action, pending the Com-
- 9 mission's issuance of a final order.
- 10 "(n) Regional Advisory Bodies.—The Commis-
- 11 sion shall establish a regional advisory body on the petition
- 12 of at least two-thirds of the States within a region that
- 13 have more than one-half of their electric load served within
- 14 the region. A regional advisory body shall be composed of
- 15 one member from each participating State in the region,
- 16 appointed by the Governor of each State, and may include
- 17 representatives of agencies, States, and provinces outside
- 18 the United States, upon execution of an international
- 19 agreement or agreements described in subsection (f). A
- 20 regional advisory body may provide advice to the electric
- 21 reliability organization, an affiliated regional reliability en-
- 22 tity, or the Commission regarding the governance of an
- 23 existing or proposed affiliated regional reliability entity
- 24 within the same region, whether an organization standard,
- 25 entity rule, or variance proposed to apply within the region

- 1 is just, reasonable, not unduly discriminatory or pref-
- 2 erential, and in the public interest, and whether fees pro-
- 3 posed to be assessed within the region are just, reasonable,
- 4 not unduly discriminatory or preferential, in the public in-
- 5 terest, and consistent with the requirements of subsection
- 6 (1). The Commission may give deference to the advice of
- 7 any such regional advisory body if that body is organized
- 8 on an interconnection-wide basis.
- 9 "(o) Coordination With Regional Transmission
- 10 Organizations.—
- 11 "(1) Each regional transmission organization
- authorized by the Commission shall be responsible
- for maintaining the short-term reliability of the bulk
- power system that it operates, consistent with orga-
- 15 nization standards.
- "(2) Except as provided in paragraph (5), in
- 17 connection with a proceeding under subsection (e) to
- consider a proposed organization standard, each re-
- gional transmission organization authorized by the
- 20 Commission shall report to the Commission, and no-
- 21 tify the electric reliability organization and any ap-
- 22 plicable affiliated regional reliability entity, regard-
- 23 ing whether the proposed organization standard
- 24 hinders or conflicts with that regional transmission
- organization's ability to fulfill the requirements of

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

any rule, regulation, order, tariff, rate schedule, or agreement accepted, approved or ordered by the Commission. Where such hindrance or conflict is identified, the Commission shall address such hindrance or conflict, and the need for any changes to such rule, order, tariff, rate schedule, or agreement accepted, approved or ordered by the Commission in its order under subsection (e) regarding the proposed standard. Where such hindrance or conflict is identified between a proposed organization standard and a provision of any rule, order, tariff, rate schedule or agreement accepted, approved or ordered by the Commission applicable to a regional transmission organization, nothing in this section shall require a change in the regional transmission organization's obligation to comply with such provision unless the Commission orders such a change and the change becomes effective. If the Commission finds that the tariff, rate schedule, or agreement needs to be changed, the regional transmission organization must expeditiously make a section 205 filing to reflect the change. If the Commission finds that the proposed organization standard needs to be changed, it shall remand the proposed organization standard

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

to the electric reliability organization under subsection (e)(3)(B).

"(3) Except as provided in paragraph (5), to the extent hindrances and conflicts arise after approval of a reliability standard under subsection (c) or organization standard under subsection (e), each regional transmission organization authorized by the Commission shall report to the Commission, and notify the electric reliability organization and any applicable affiliated regional reliability entity, regarding any reliability standard approved under subsection (c) or organization standard that hinders or conflicts with that regional transmission organization's ability to fulfill the requirements of any rule, regulation, order, tariff, rate schedule, or agreement accepted, approved or ordered by the Commission. The Commission shall seek to assure that such hindrances or conflicts are resolved promptly. Where a hindrance or conflict is identified between a reliability standard or an organization standard and a provision of any rule, order, tariff, rate schedule or agreement accepted, approved or ordered by the Commission applicable to a regional reliability organization, nothing in this section shall require a change in the regional transmission organization's

commission orders such a change and the change becomes effective. If the Commission finds that the tariff, rate schedule or agreement needs to be changed, the regional transmission organization must expeditiously make a section 205 filing to reflect the change. If the Commission finds that an organization standard needs to be changed, it shall order the electric reliability organization to develop and submit a modified organization standard under subsection (e)(3)(C).

"(4) An affiliated regional reliability entity and a regional transmission organization operating in the same geographic area shall cooperate to avoid conflicts between implementation and enforcement of organization standards by the affiliated regional reliability entity and implementation and enforcement by the regional transmission organization of tariffs, rate schedules, and agreements accepted, approved or ordered by the Commission. In areas without an affiliated regional reliability entity, the electric reliability organization shall act as the affiliated regional reliability entity for purposes of this paragraph.

1 "(5) Until 6 months after approval of applica-2 subsection (h)(3) procedures, any reliability 3 standard, guidance, or practice contained in Commission-accepted tariffs, rate schedules, or agree-5 ments in effect of any Commission-authorized inde-6 pendent system operator or regional transmission or-7 ganization shall continue to apply unless the Com-8 mission accepts an amendment thereto by the appli-9 cable operator or organization, or upon complaint 10 finds them to be unjust, unreasonable, unduly dis-11 criminatory or preferential, or not in the public in-12 terest. At the conclusion of such transition period, 13 any such reliability standard, guidance, practice, or 14 amendment thereto that the Commission determines 15 is inconsistent with organization standards shall no 16 longer apply.".

- 17 (b) Enforcement.—Sections 316 and 316A of the 18 Federal Power Act are each amended by striking "or 214" 19 each place it appears and inserting "214, or 216".
- 20 SEC. 402. APPLICATION OF ANTITRUST LAWS.
- Notwithstanding any other provision of law, each of the following activities are rebuttably presumed to be in compliance with the antitrust laws of the United States:
- 24 (1) Activities undertaken by the Electric Reli-25 ability Organization under section 216 of the Fed-

1	eral Power Act or affiliated regional reliability entity
2	operating under an agreement in effect under sec-
3	tion 216(h) of such Act.
4	(2) Activities of a member of the Electric Reli-
5	ability Organization or affiliated regional reliability
6	entity in pursuit of organization objectives under
7	section 216 of the Federal Power Act undertaken in
8	good faith under the rules of the organization.
9	Primary jurisdiction, and immunities and other affirma-
10	tive defenses, shall be available to the extent otherwise ap-
11	plicable.
12	TITLE V—IMPROVED
12 13	ELECTRICITY CAPACITY
13	ELECTRICITY CAPACITY
13 14	ELECTRICITY CAPACITY AND ACCESS
13 14 15	ELECTRICITY CAPACITY AND ACCESS SEC. 501. UNIVERSAL AND AFFORDABLE SERVICE.
13 14 15 16	ELECTRICITY CAPACITY AND ACCESS SEC. 501. UNIVERSAL AND AFFORDABLE SERVICE. It is the sense of the Congress that—
13 14 15 16	ELECTRICITY CAPACITY AND ACCESS SEC. 501. UNIVERSAL AND AFFORDABLE SERVICE. It is the sense of the Congress that— (1) every retail electric consumer should have
113 114 115 116 117	ELECTRICITY CAPACITY AND ACCESS SEC. 501. UNIVERSAL AND AFFORDABLE SERVICE. It is the sense of the Congress that— (1) every retail electric consumer should have access to electric energy at reasonable and afford-
13 14 15 16 17 18	ELECTRICITY CAPACITY AND ACCESS SEC. 501. UNIVERSAL AND AFFORDABLE SERVICE. It is the sense of the Congress that— (1) every retail electric consumer should have access to electric energy at reasonable and affordable rates; and
13 14 15 16 17 18 19 20	ELECTRICITY CAPACITY AND ACCESS SEC. 501. UNIVERSAL AND AFFORDABLE SERVICE. It is the sense of the Congress that— (1) every retail electric consumer should have access to electric energy at reasonable and affordable rates; and (2) the States should ensure that retail electric
13 14 15 16 17 18 19 20 21	ELECTRICITY CAPACITY AND ACCESS SEC. 501. UNIVERSAL AND AFFORDABLE SERVICE. It is the sense of the Congress that— (1) every retail electric consumer should have access to electric energy at reasonable and affordable rates; and (2) the States should ensure that retail electric competition does not result in the loss of service to

1	(1) the term "eligible public purpose program"
2	means a State or tribal program that—
3	(A) assists low-income households in meet-
4	ing their home energy needs;
5	(B) provides for the planning, construc-
6	tion, or improvement of facilities to generate,
7	transmit, or distribute electricity to Indian
8	tribes or rural and remote communities;
9	(C) provides for the development and im-
10	plementation of measures to reduce the demand
11	for electricity;
12	(D) provides for the development and im-
13	plementation of a qualifying greenhouse gas
14	mitigation project; or
15	(E) provides for—
16	(i) new or additional capacity, or im-
17	proves the efficiency of existing capacity,
18	from a wind, biomass, geothermal, solar
19	thermal, photovoltaic, combined heat and
20	power energy source, or
21	(ii) additional generating capacity
22	achieved from increased efficiency at exist-
23	ing hydroelectric dams or additions of new
24	capacity at existing hydroelectric dams;

- 1 (2) the term "fiscal agent" means the entity 2 designated under subsection (c);
 - (3) the term "Fund" means the Public Benefits
 Fund established under subsection (b);
 - (4) the term "qualifying greenhouse gas mitigation project" means a project to reduce the emissions of greenhouse gases that is at least fifty percent cofunded by a power generator;
 - (5) the term "Indian tribe" means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians;
 - (6) the term "Secretary" means the Secretary of Energy; and
- (7) the term "State" means each of the Statesand the District of Columbia.
- 22 (b) Public Benefits Fund.—There is established 23 in the Treasury of the United States a separate fund, to 24 be known as the Public Benefits Fund. The Fund shall 25 consist of amounts collected by the fiscal agent under sub-

4

6

7

8

9

10

11

12

13

14

15

16

17

18

1	section (e). The fiscal agent may disburse amounts in the
2	Fund, without further appropriation, in accordance with
3	this section.
4	(c) Duties of the Fiscal Agent.—The Secretary
5	shall appoint a fiscal agent who shall collect and disburse
6	the amounts in the Fund in accordance with this section.
7	(d) Duties of the Secretary.—The Secretary
8	shall prescribe—
9	(1) rules for the equitable allocation of the
10	Fund among States and Indian tribes based upon—
11	(A) the number of low-income households
12	in such State or tribal jurisdiction; and
13	(B) the average annual cost of electricity
14	used by households in such State or tribal juris-
15	diction;
16	(2) the criteria by which the fiscal agent deter-
17	mines whether a State or tribal government's pro-
18	gram is an eligible public purpose program; and
19	(3) rules governing the award of funds for
20	qualifying greenhouse gas mitigation projects that
21	the Secretary determines are necessary to ensure
22	such projects are cost-effective.
23	(e) Public Benefits Charge.—
24	(1) Amount of Charge.—As a condition of
25	existing or future interconnection with facilities of

- any transmitting utility, each owner of an electric generating facility whose nameplate capacity exceeds five megawatts shall pay the transmitting utility a public benefits charge equal to one mill per kilowatthour on electric energy generated by such electric generating facility.
 - (2) Affiliates.—Each owner of an electric generating facility subject to the charge under paragraph (1) shall pay the charge even if the generation facility and the transmitting facility are under common ownership or are otherwise affiliated.
 - (3) IMPORTED ELECTRICITY.—Each importer of electric energy from Canada or Mexico, as a condition of existing or future interconnection with facilities of any transmitting utility in the United States, shall pay this same charge for imported electric energy.
 - (4) Payment of the charge.—The transmitting utility shall pay the amounts collected to the fiscal agent at the close of each month, and the fiscal agent shall deposit the amounts into the Fund as offsetting collections.
- 23 (f) DISBURSAL FROM THE FUND.—
- 24 (1) BLOCK GRANTS.—The fiscal agent shall dis-25 burse amounts in the Fund to participating States

- and tribal governments as a block grant to carry out eligible public purpose programs in accordance with
- 3 this subsection and rules prescribed under sub-
- 4 section (d).

11

12

13

14

15

16

17

18

- 5 (2) Annual payments.—The fiscal agent shall 6 disburse amounts for a calendar year from the Fund 7 to a State or tribal government in twelve equal 8 monthly payments beginning two months after the 9 beginning of the calendar year.
 - (3) ELIGIBLE RECIPIENTS.—The fiscal agent shall make distributions to the State or tribal government or to an entity designated by the State or tribal government to receive payments.
 - (4) Limitation on use of funds.—A State or tribal government may use amounts received only for the eligible public purpose programs the State or tribal government designated in its submission to the fiscal agent and the fiscal agent determined eligible.
- 20 (g) Report.—One year before the date of expiration 21 of this section, the Secretary shall report to Congress 22 whether a public benefits fund should continue to exist.
- 23 (h) Sunset.—This section expires at midnight on 24 December 31, 2015.

SEC. 503. RURAL CONSTRUCTION GRANTS.

- 2 Section 313 of the Rural Electrification Act of 1936
- 3 (7 U.S.C. 940c) is amended by adding after subsection
- 4 (b) the following:
- 5 "(c) Rural and Remote Communities Elec-
- 6 TRIFICATION GRANTS.—The Secretary of Agriculture, in
- 7 consultation with the Secretary of Energy and the Sec-
- 8 retary of the Interior, may provide grants to eligible bor-
- 9 rowers under this Act for the purpose of increasing energy
- 10 efficiency, siting or upgrading transmission and distribu-
- 11 tion lines, or providing or modernizing electric facilities
- 12 for—
- "(1) a unit of local government of a State or
- 14 territory; or
- 15 "(2) an Indian tribe.
- 16 "(d) Grant Criteria.—The Secretary shall make
- 17 grants based on a determination of cost-effectiveness and
- 18 most effective use of the funds to achieve the stated pur-
- 19 poses of this section.
- 20 "(e) Preference.—In making grants under this
- 21 section, the Secretary shall give a preference to renewable
- 22 energy facilities.
- 23 "(f) Definition.—For purposes of this section, the
- 24 term 'Indian tribe' means any Indian tribe, band, nation,
- 25 or other organized group or community, including any
- 26 Alaska Native village or regional or village corporation as

1	defined in or established pursuant to the Alaska Native
2	Claims Settlement Act (43 U.S.C. 1601 et seq.), which
3	is recognized as eligible for the special programs and serv-
4	ices provided by the United States to Indians because of
5	their status as Indians.
6	"(g) AUTHORIZATION.—There is authorized to be ap-
7	propriated for purposes of subsection (c) \$20,000,000 for
8	each of the seven fiscal years following the date of enact-
9	ment of this section.".
10	SEC. 504. COMPREHENSIVE INDIAN ENERGY PROGRAM.
11	(a) Establishment of Program.—Title XXVI of
12	the Energy Policy Act of 1992 (25 U.S.C. 3501–3506)
13	is amended by adding after section 2606 the following:
14	"SEC. 2607. COMPREHENSIVE INDIAN ENERGY PROGRAM.
15	"(a) Definitions.—For purposes of this section—
16	"(1) 'Director' means the Director of the Office
17	of Indian Energy Policy and Programs established
18	by section 217 of the Department of Energy Organi-
19	zation Act, and
20	"(2) 'Indian land' means—
21	"(A) any land within the limits of an In-
22	dian reservation, pueblo, or ranchera;
23	"(B) any land not within the limits of an
24	Indian reservation, pueblo, or ranchera whose

1	title on the date of enactment of this section
2	was held—
3	"(i) in trust by the United States for
4	the benefit of an Indian tribe,
5	"(ii) by an Indian tribe subject to re-
6	striction by the United States against
7	alienation, or
8	"(iii) by a dependent Indian commu-
9	nity; and
10	"(C) land conveyed to an Alaska Native
11	Corporation under the Alaska Native Claims
12	Settlement Act.
13	"(b) Indian Energy Education, Planning and
14	Management Assistance.—(1) The Director shall es-
15	tablish programs within the Office of Indian Energy Pol-
16	icy and Programs to assist Indian tribes to meet their en-
17	ergy education, research and development, planning, and
18	management needs.
19	"(2) The Director may make grants, on a competitive
20	basis, to an Indian tribe for—
21	"(A) renewable, energy efficiency, and conserva-
22	tion programs;
23	"(B) studies and other activities supporting
24	tribal acquisition of energy supplies, services, and fa-
25	cilities; and

1	"(C) planning, constructing, developing, oper-
2	ating, maintaining, and improving tribal electrical
3	generation, transmission, and distribution facilities.
4	"(3) The Director may develop, in consultation with
5	Indian tribes, a formula for making grants under this sec-
6	tion. The formula may take into account the following—
7	"(A) total number of acres of Indian land
8	owned by an Indian tribe;
9	"(B) total number of households on the tribe's
10	Indian land;
11	"(C) total number of households on the Indian
12	tribe's Indian land that have no electricity service or
13	are underserved; and
14	"(D) financial or other assets available to the
15	tribe from any source.
16	"(4) In making a grant under paragraph (2)(E), the
17	Director shall give priority to an application received from
18	an Indian tribe that is not served or is served inadequately
19	by an electric utility, as that term is defined in section
20	3(4) of the Public Utility Regulatory Policies Act of 1978
21	(16 U.S.C. 2602(4)), or by a person, State agency, or any
22	other non-federal entity that owns or operates a local dis-
23	tribution facility used for the sale of electric energy to an
24	electric consumer.

- 1 "(5) There are authorized to be appropriated to the
- 2 Department of Energy such sums as may be necessary to
- 3 carry out the purposes of this section.
- 4 "(c) Application of Buy Indian Act.—(1) An
- 5 agency or department of the United States Government
- 6 may give, in the purchase and sale of electricity, oil, gas,
- 7 coal, or other energy product or by-product produced, con-
- 8 verted, or transferred on Indian lands, preference, under
- 9 section 23 of the Act of June 25, 1910 (25 U.S.C. 47)
- 10 (commonly known as the "Buy Indian Act"), to an energy
- 11 and resource production enterprise, partnership, corpora-
- 12 tion, or other type of business organization majority or
- 13 wholly owned and controlled by an Indian, a tribal govern-
- 14 ment, or a business, enterprise, or operation of the Amer-
- 15 ican Indian Tribal Governments.
- 16 "(2) In implementing this subsection, an agency or
- 17 department shall pay no more for energy production than
- 18 the prevailing market price and shall obtain no less than
- 19 existing market terms and conditions.
- 20 "(d) Effect on Other Laws.—This section does
- 21 not—
- "(1) limit the discretion vested in an Adminis-
- trator of a Federal power marketing agency to mar-
- 24 ket and allocate Federal power, or

1	"(2) alter Federal laws under which a Federal
2	power marketing agency markets, allocates, or pur-
3	chases power.".
4	(b) Office of Indian Policy and Programs.—
5	Title II of the Department of Energy Organization Act
6	is amended by adding at the end the following:
7	"OFFICE OF INDIAN ENERGY POLICY AND
8	PROGRAMS.
9	"Sec. 217. (a) There is established within the De-
10	partment an Office of Indian Energy Policy and Progams.
11	This Office shall be headed by a Director, who shall be
12	appointed by the Secretary and compensated at the rate
13	equal to that of level IV of the Executive Schedule under
14	section 5315 of Title 5, United States Code. The Director
15	shall perform the duties assigned the Director under the
16	Comprehensive Indian Energy Act and this section.
17	"(b) The Director shall provide, direct, foster, coordi-
18	nate, and implement energy planning, education, manage-
19	ment, conservation, and delivery programs of the Depart-
20	ment that—
21	"(1) promote tribal energy efficiency and utili-
22	zation;
23	"(2) modernize and develop, for the benefit of
24	Indian tribes, tribal energy and economic infrastruc-
25	ture related to natural resource development and
26	electrification;

1	"(3) preserve and promote tribal sovereignty
2	and self determination related to energy matters and
3	energy deregulation;
4	"(4) lower or stabilize energy costs; and
5	"(5) electrify tribal members' homes and tribal
6	lands.
7	"(c) The Director shall carry out the duties assigned
8	the Secretary under title XXVI of the Energy Policy Act
9	of 1992 (25 U.S.C. 3501 et seq.).".
10	(c) Conforming Amendments.—
11	(1) Section 2603(c) of the Energy Policy Act of
12	1992 (25 U.S.C. 3503(c)) is amended to read as fol-
13	lows:
14	"(c) There are authorized to be appropriated such
15	sums as may be necessary to carry out the purposes of
16	this section."
17	(2) The table of contents of the Department of
18	Energy Act is amended by inserting after the item
19	relating to section 216 the following new item:
	"217. Office of Indian Energy Policy and Programs.".
20	(3) Section 5315 of title 5, United States Code,
21	is amended by inserting "Director, Office of Indian
22	Energy Policy and Programs, Department of En-
23	ergy." after "Director, Office of Science, Depart-
24	ment of Energy"

1 SEC. 505. ENVIRONMENTAL DISCLOSURE TO CONSUMERS.

- 2 (a) Retail Sales.—The Federal Trade Commission
- 3 shall issue rules requiring each retail electric supplier to
- 4 include with each monthly billing to retail electric con-
- 5 sumers a statement of the known energy sources used to
- 6 generate the electricity the supplier distributes, on an an-
- 7 nual basis, stated in numbers of kilowatt-hours, both in
- 8 percentages and in the form of a pie chart, of biomass
- 9 power, coal-fired power, hydropower, natural gas-fired
- 10 power, nuclear power, oil-fired power, wind power, geo-
- 11 thermal power, solar thermal power, photovoltaic power,
- 12 combined heat and power, and other sources of power, re-
- 13 spectively.
- 14 (b) Wholesale Sales.—The Federal Trade Com-
- 15 mission shall issue rules requiring any electric supplier
- 16 that sells or makes an offer to sell electric energy at whole-
- 17 sale to provide the purchaser or offeree such known infor-
- 18 mation about the energy source used to generate the elec-
- 19 tricity, on an annual basis, as the Commission may deter-
- 20 mine.
- 21 (c) Certification Program.—The Secretary of
- 22 Energy, in consultation with the Federal Trade Commis-
- 23 sion, shall develop a certification program for each retail
- 24 electric supplier that sells electric energy, at least 50 per-
- 25 cent of which, averaged over a year, is generated from re-
- 26 newable energy sources. For purposes of this subsection,

- 1 the term "renewable energy source" means biomass, wind
- 2 power, geothermal power, solar thermal power, or photo-
- 3 voltaic power.

4 SEC. 506. CONSUMER PROTECTIONS.

- 5 (a) Information Disclosure.—The Federal Trade
- 6 Commission shall issue rules requiring any retail electric
- 7 supplier that sells or makes an offer to sell electric energy,
- 8 or solicits retail electric consumers to purchase electric en-
- 9 ergy, to provide the retail electric consumers, in addition
- 10 to the information required under section 505, a state-
- 11 ment containing the following information:
- 12 (1) The nature of the service being offered, in-
- 13 cluding information about interruptibility of service.
- 14 (2) The price of electric energy, including a de-15 scription of any variable charges.
- 16 (3) A description of all other charges that are
- associated with the service being offered, including
- 18 access charges, exit charges, back-up service
- 19 charges, stranded cost recovery charges, and cus-
- tomer service charges.
- 21 (4) Information concerning the product or price
- that the Federal Trade Commission determines is
- technologically and economically feasible to provide
- and is of assistance to retail electric consumers in
- 25 making purchasing decisions.

(b) Consumer Privacy.—

- (1) Prohibition.—The Federal Trade Commission shall issue rules prohibiting any person who obtains consumer information in connection with the sale or delivery of electric energy to a retail electric consumer from using, disclosing, or permitting access to such information unless the consumer to whom such information relates provides prior written approval.
- (2) PERMITTED USE.—The rules issued under this subsection shall not prohibit any person from using, disclosing, or permitting access to consumer information referred to in paragraph (1) for any of the following purposes:
 - (A) To facilitate a retail electric consumer's change in selection of a retail electric supplier under procedures approved by the State or State commission.
 - (B) To initiate, render, bill, or collect for the sale or delivery of electric energy to retail electric consumers or for related services.
 - (C) To protect the rights or property of the person obtaining such information.
- (D) To protect retail electric consumers from fraud, abuse, and unlawful subscription in

1	the sale or delivery of electric energy to such
2	consumers.
3	(E) For law enforcement purposes.
4	(F) For purposes of compliance with any
5	Federal, State, or local law or regulation au-
6	thorizing disclosure of information to a Federal,
7	State, or local agency.
8	(3) Aggregate consumer information.—
9	The rules issued under this subsection shall permit
10	any person to use, disclose, and permit access to ag-
11	gregate consumer information and shall require local
12	distribution companies to make such information
13	available to retail electric suppliers upon request and
14	payment of a reasonable fee.
15	(4) Definitions.—As used in this section:
16	(A) The term "aggregate consumer infor-
17	mation" means collective data that relates to a
18	group or category of retail electric consumers,
19	from which individual consumer identities and
20	characteristics have been removed.
21	(B) The term "consumer information"
22	means information that relates to the quantity,
23	technical configuration, type, destination, or
24	amount of use of electric energy delivered to

any retail electric consumer.

(C) The term "State commission" has the 1 2 meaning given such term in section 3(15) of the 3 Federal Power Act (16 U.S.C. 796(15)). 4 (c) Unfair Trade Practices.— (1) Slamming.—The Federal Trade Commis-6 sion shall issue rules prohibiting the change of selec-7 tion of a retail electric supplier except with the in-8 formed consent of the retail electric consumer. 9 (2) Cramming.—The Federal Trade Commis-10 sion shall issue rules prohibiting the sale of goods 11 and services to a retail electric consumer unless ex-12 pressly authorized by law or the retail electric con-13 sumer. 14 ENFORCE-(d) FEDERAL TRADE Commission 15 MENT.—Violation of a rule issued under this section shall be treated as a violation of a rule under section 18 of the 16 Federal Trade Commission Act (15 U.S.C. 57a). All functions and powers of the Federal Trade Commission under 18 19 such Act are available to the Federal Trade Commission 20 to enforce compliance with this section notwithstanding 21 any jurisdictional limits in such Act. 22 (e) STATE AUTHORITY.—(1) This section does not preclude a State or State commission from prescribing and enforcing additional laws, rules, or procedures regarding the practices which are the subject of this section, so long

1	as such laws, rules, or procedures are not inconsistent with
2	the provisions of this section or with any rule prescribed
3	by the Federal Trade Commission pursuant to it.
4	(2) The remedies provided by this section are in addi-
5	tion to any other remedies available by law.
6	(f) Definitions.—As used in this section—
7	(1) the term "retail electric consumer" means
8	any person who purchases electric energy for ulti-
9	mate consumption;
10	(2) the term "retail electric supplier" means
11	any person who sells electric energy to a retail elec-
12	tric consumer for ultimate consumption; and
13	(3) the term "State commission" has the mean-
14	ing given such term in section 3(15) of the Federal
15	Power Act (16 U.S.C. 796(15)).
16	SEC. 507. WHOLESALE ELECTRICITY MARKET DATA.
17	Section 213 of the Federal Power Act (16 U.S.C.
18	824l) is amended by adding at the end the following:
19	"(c) Wholesale Electricity Market Data.—
20	"(1) Not later than 180 days after the date of
21	the enactment of this subsection, the Commission
22	shall, by rule, establish an information system that
23	gives persons who buy electric energy for resale,
24	State regulatory authorities, and the public access to
25	current information about—

1	"(A) the availability of electric energy gen-
2	erating capacity and known generating con-
3	straints, and
4	"(B) the availability of transmission capac-
5	ity and known transmission constraints.
6	"(2) The rule shall require—
7	"(A) each electric utility and each Federal
8	power marketing administration that owns, op-
9	erates, or controls facilities used for the genera-
10	tion or transmission of electric energy sold or
11	transmitted in interstate commerce to report,
12	by unit, on a real-time basis—
13	"(i) the total number of megawatts
14	(as a 60 second average) produced by each
15	generating facility it owns, operates, or
16	controls, and
17	"(ii) the total number of megawatts of
18	capacity at each facility it owns, operates,
19	or controls that is not being used to gen-
20	erate electric power; and
21	"(B) each transmitting utility to report, on
22	a real-time basis—
23	"(i) the total number of megawatts
24	transmitted on each transmission facility it
25	owns, operates, or controls, and

1	"(ii) the total number of megawatts
2	scheduled and the current capacity or rat-
3	ing of each transmission facility it owns,
4	operates, or controls.
5	"(3) The Commission may enter agreements
6	with regional electric reliability councils to collect,
7	retain, and make available to persons who buy elec-
8	tric energy for resale, state regulatory authorities,
9	and the public the information required to be sub-
10	mitted by the rule.".
11	SEC. 508. WHOLESALE ELECTRIC ENERGY RATES IN THE
12	WESTERN ENERGY MARKET.
12 13	western energy market. (a) Imposition of Wholesale Electric Energy
13	(a) Imposition of Wholesale Electric Energy
13 14 15	(a) Imposition of Wholesale Electric Energy Rates.—Not later than 60 days after the date of enact-
13 14 15 16	(a) Imposition of Wholesale Electric Energy Rates.—Not later than 60 days after the date of enactment of this title, the Federal Energy Regulatory Commis-
13 14 15 16 17	(a) Imposition of Wholesale Electric Energy Rates.—Not later than 60 days after the date of enactment of this title, the Federal Energy Regulatory Commission shall impose just and reasonable load-differentiated
13 14 15 16 17	(a) Imposition of Wholesale Electric Energy Rates.—Not later than 60 days after the date of enactment of this title, the Federal Energy Regulatory Commission shall impose just and reasonable load-differentiated demand rates or cost-of-service based rates on sales by
13 14 15 16 17	(a) Imposition of Wholesale Electric Energy Rates.—Not later than 60 days after the date of enactment of this title, the Federal Energy Regulatory Commission shall impose just and reasonable load-differentiated demand rates or cost-of-service based rates on sales by electric utilities of electric energy at wholesale in the west-
13 14 15 16 17 18	(a) Imposition of Wholesale Electric Energy Rates.—Not later than 60 days after the date of enactment of this title, the Federal Energy Regulatory Commission shall impose just and reasonable load-differentiated demand rates or cost-of-service based rates on sales by electric utilities of electric energy at wholesale in the west-ern energy market.
13 14 15 16 17 18 19 20	(a) Imposition of Wholesale Electric Energy Rates.—Not later than 60 days after the date of enactment of this title, the Federal Energy Regulatory Commission shall impose just and reasonable load-differentiated demand rates or cost-of-service based rates on sales by electric utilities of electric energy at wholesale in the western energy market. (b) Limitations.—
13 14 15 16 17 18 19 20 21	(a) Imposition of Wholesale Electric Energy Rates.—Not later than 60 days after the date of enactment of this title, the Federal Energy Regulatory Commission shall impose just and reasonable load-differentiated demand rates or cost-of-service based rates on sales by electric utilities of electric energy at wholesale in the western energy market. (b) Limitations.— (1) In General.—A load-differentiated de-

1	(A) prohibits electric utilities from passing
2	through to retail consumers wholesale rates ap-
3	proved by the Commission; or
4	(B) imposes a price limit on the sale of
5	electric energy at retail that—
6	(i) precludes an electric utility from
7	recovering all of the costs incurred by the
8	electric utility in purchasing electric en-
9	ergy; or
10	(ii) has precluded an electric utility
11	(or any entity that is authorized to pur-
12	chase electricity on behalf of an electric
13	utility or a State) from making a payment
14	when due to any entity within the western
15	energy market from which the electric util-
16	ity purchased electric energy, and the de-
17	fault has not been cured.
18	(2) No orders to sell without guarantee
19	OF PAYMENT.—Notwithstanding section 302 of the
20	Natural Gas Policy Act of 1978 (15 U.S.C. 3362),
21	section 202(c) of the Federal Power Act (16 U.S.C.
22	824a(c)), or section 101 of the Defense Production
23	Act of 1950 (50 U.S.C. App. 2071), neither the
24	President, the Secretary of Energy, nor the Commis-

sion may issue an order that requires a seller of

1	electric energy or natural gas to sell, on or after the
2	date of enactment of this title, electric energy or
3	natural gas to a purchaser in a State described in
4	paragraph (1) unless there is a guarantee that, in
5	the determination of the Commission, is sufficient to
6	ensure that the seller will be paid—
7	(A) the full purchase price when due, as
8	agreed upon by the buyer and seller; or
9	(B) if the buyer and seller are unable to
10	agree upon a price—
11	(i) a fair and equitable price for nat-
12	ural gas as determined by the President
13	under section 302 of the Natural Gas Pol-
14	iey Act of 1978 (15 U.S.C. 3362), or
15	(ii) a just and reasonable price for
16	electric energy as determined by the Sec-
17	retary of Energy or the Commission, as
18	appropriate, under section 202(c) of the
19	Federal Power Act (16 U.S.C. 824a(c)).
20	(3) Requirement to meet in-state de-
21	MAND.—Notwithstanding any other provision of law,
22	a State electric utility commission in the western en-
23	ergy market may prohibit an electric utility in the
24	State from making any sale of electric energy to a

purchaser in a State described in paragraph (1) at

- any time at which a State electric utility commission
- 2 determines that the electric utility is not meeting the
- demand for electric energy in the service area of the
- 4 electric utility.
- 5 (c) Report.—Not later than 120 days after the date
- 6 of enactment of this title, the Secretary of Energy shall—
- 7 (1) conduct an investigation to determine
- 8 whether any electric utility in a State described in
- 9 subsection (d)(1) has been rendered uncreditworthy
- or has defaulted on any payment for electric energy
- as a result of a transfer of funds by the electric util-
- ity to a parent company or to an affiliate of the elec-
- tric utility (except a payment made in accordance
- with a State deregulation statute); and
- 15 (2) submit to the Committee on Energy and
- 16 Commerce of the House of Representatives and the
- 17 Committee on Energy and Natural Resources of the
- 18 Senate a report describing the results of the inves-
- 19 tigation.
- 20 (d) Duration.—A load-differentiated demand rate
- 21 or cost-of-service based rate imposed under this section
- 22 shall remain in effect until such time as the market for
- 23 electric energy in the western energy market reflects just
- 24 and reasonable rates, as determined by the Commission.

1	(e) Authority of State Regulatory Authori-
2	TIES.—This section does not diminish or have any other
3	effect on the authority of a State regulatory authority (as
4	defined in section 3 of the Federal Power Act (16 U.S.C
5	796)) to regulate rates and charges for the sale of electric
6	energy to consumers, including the authority to determine
7	the manner in which wholesale rates shall be passed or
8	to consumers (including the setting of tiered pricing, real-
9	time pricing, and baseline rates).
10	(f) Definitions.—For purposes of this section—
11	(1) Commission.—The term "Commission"
12	means the Federal Energy Regulatory Commission
13	(2) Cost-of-service based rate.—The term
14	"cost-of-service based rate" means a rate, charge, or
15	classification for the sale of electric energy that is
16	equal to—
17	(A) all the variable and fixed costs for pro-
18	ducing the electric energy; and
19	(B) a reasonable return on invested cap-
20	ital.
21	(3) Electric utility.—The term "electric
22	utility" means any person, State agency (including
23	any municipality), Federal agency (including the
24	Tennessee Valley Authority or any Federal power

- 1 marketing agency) that sells electric energy in inter-2 state commerce.
- 3 (4) Load-differentiated demand rate" means
 4 The term "load-differentiated demand rate" means
 5 a rate, charge, or classification for the sale of elec6 tric energy that reflects differences in the demand
 7 for electric energy during various times of day,
 8 months, seasons, or other time periods.
- 9 (5) Western energy market" means the area covered by
 10 "western energy market" means the area covered by
 11 the Western Systems Coordinating Council of the
 12 North American Electric Reliability Council.
- 13 (g) Repeal.—Effective March 1, 2003, this section 14 is repealed, and any load-differentiated demand rate or 15 cost-of-service based rate imposed under this section that 16 is then in effect shall no longer be effective.

17 SEC. 509. NATURAL GAS RATE CEILING IN CALIFORNIA.

- Section 284.8(i) of title 18, Code of Federal Regula-19 tions (relating to the waiver of the maximum rate ceiling 20 on capacity release transactions on interstate natural gas 21 pipelines) shall not apply to the transportation of natural 22 gas into the State of California from outside the State,
- 23 effective on the date of enactment of this section.

SEC. 510. SALE PRICE IN BUNDLED NATURAL GAS TRANS-2 ACTIONS. 3 (a) DISCLOSURE.—Not later than 60 days after the date of enactment of this section, the Federal Energy Reg-4 5 ulatory Commission shall issue a rule under section 4 of the Natural Gas Act (15 U.S.C. 717c) requiring any per-6 7 son that sells natural gas subject to the jurisdiction of the 8 Commission in a bundled transaction to file with the Com-9 mission, not later than the date specified by the Commis-10 sion, a statement that discloses— 11 (1) the portion of the sale price that is attrib-12 utable to the price paid by the seller for the natural 13 gas; and 14 (2) the portion of the sale price that is attrib-15 utable to the price paid for the transportation of the 16 natural gas. 17 (b) DEFINITION OF BUNDLED TRANSACTION.—For purposes of this section, the term "bundled transaction" 18 19 means a transaction for the sale of natural gas in which 20 the sale price includes both the cost of the natural gas

and the cost of transporting the natural gas.

1 TITLE VI—RENEWABLES AND 2 DISTRIBUTED GENERATION

_	DISTRIBUTED GENERALITON
3	SEC. 601. ASSESSMENT OF RENEWABLE ENERGY RE-
4	SOURCES.
5	(a) RESOURCE ASSESSMENT.—Not later than one
6	year after the date of enactment of this title, and each
7	year thereafter, the Secretary of Energy shall publish an
8	assessment of all renewable energy resources available
9	within the United States.
10	(b) Contents of Report.—The report published
11	under subsection (a) shall contain—
12	(1) a detailed inventory describing the available
13	amount and characteristics of solar, wind, biomass,
14	geothermal, hydroelectric and other renewable en-
15	ergy sources, and
16	(2) such other information as the Secretary of
17	Energy believes would be useful in developing such
18	renewable energy resources, including descriptions of
19	surrounding terrain, population and load centers,
20	nearby energy infrastructure, location of energy and
21	water resources, and available estimates of the costs
22	needed to develop each resource.

1 SEC. 602. FEDERAL PURCHASE REQUIREMENT.

- 2 (a) Requirement.—The President shall ensure
- 3 that, of the total amount of electric power the federal gov-
- 4 ernment purchases during any fiscal vear—
- 5 (1) not less than 3 percent in fiscal years 2002
- 6 through 2004,
- 7 (2) not less than 5 percent in fiscal years 2005
- 8 through 2009, and
- 9 (3) not less than 7.5 percent in fiscal year 2010
- and each fiscal year thereafter—shall be electric
- power generated by a renewable energy source.
- 12 (b) Definition.—For purposes of this section, the
- 13 term "renewable energy source" means—
- 14 (1) wind;
- 15 (2) biomass;
- 16 (3) a geothermal source;
- 17 (4) a solar thermal source;
- 18 (5) a photovoltaic source;
- 19 (6) fuel cells; or
- 20 (7) additional hydroelectric generation capacity
- 21 achieved from increased efficiency or additions of
- 22 new capacity at an existing hydroelectric dam.
- 23 SEC. 603. INTERCONNECTION STANDARDS.
- Section 210 of the Federal Power Act (42 U.S.C.
- 25 824i) is amended by adding at the end the following:

1	"(f) Special Rule for Distributed Generation
2	FACILITIES.—
3	"(1) Definition.—As used in this subsection,
4	the term 'distributed generation facility' means an
5	electric power generation facility that—
6	"(A) is designed to serve retail customers
7	at or near the point of consumption; and
8	"(B) interconnects with local distribution
9	facilities.
10	"(2) Interconnection.—A local distribution
11	company shall interconnect a distributed generation
12	facility with the local distribution facilities of such
13	company if the distributed generation facility owner
14	or operator complies with the final rule adopted
15	under paragraph (3) and pays the costs directly re-
16	lated to such interconnection. Costs, terms, and con-
17	ditions related to such interconnection shall be just,
18	reasonable, and not unduly discriminatory.
19	"(3) Rules.—Within one year after the date of
20	enactment of this subsection, the Commission shall
21	adopt a final rule to establish safety, reliability, and
22	power quality standards related to distributed gen-
23	eration facilities. For purposes of developing such
24	standards, the Commission may classify distributed
25	power generation facilities based on size and pre-

1	scribe different requirements for different classes of
2	facilities. The Commission shall establish an advi-
3	sory committee composed of qualified experts to
4	make recommendations to the Commission on the
5	development of such standards.".
6	SEC. 604. NET METERING.
7	Title VI of the Public Utility Regulatory Policies Act
8	of 1978 is amended by adding at the end the following:
9	"SEC. 605. NET METERING FOR RENEWABLE ENERGY AND
10	FUEL CELLS.
11	"(a) Definitions.—For purposes of this section:
12	"(1) The term 'eligible on-site generating facil-
13	ity' means—
14	"(A) a facility on the site of a residential
15	electric consumer with a maximum generating
16	capacity of 100 kilowatts or less that is fueled
17	by solar or wind energy; or
18	"(B) a facility on the site of a commercial
19	electric consumer with a maximum generating
20	capacity of 250 kilowatts or less that is fueled
21	solely by a renewable energy resource.
22	"(2) The term 'renewable energy resource'
23	means solar energy, wind energy, biomass, geo-
24	thermal energy, or fuel cells.

"(3) The term 'net metering service' means 1 2 service to an electric consumer under which elec-3 tricity generated by that consumer from an eligible 4 on-site generating facility and delivered to the dis-5 tribution system through the same meter through 6 which purchased electricity is received may be used 7 to offset electricity provided by the retail electric 8 supplier to the electric consumer during the applica-9 ble billing period so that an electric consumer is 10 billed only for the net electricity consumed during 11 the billing period. 12 "(b) Requirement To Provide Net Metering Service.—Each retail electric supplier shall make avail-13 14 able upon request net metering service to any retail elec-15 tric consumer that the supplier currently serves or solicits 16 for service. 17 "(c) RATES AND CHARGES.— "(1) IDENTICAL CHARGES.—A retail electric 18 19 supplier— "(A) shall charge the owner or operator of 20 21 an on-site generating facility rates and charges 22 that are identical to those that would be

charged other retail electric customers of the

electric company in the same rate class; and

23

- 1 "(B) shall not charge the owner or oper-2 ator of an on-site generating facility any addi-3 tional standby, capacity, interconnection, or 4 other rate or charge.
 - "(2) Measurement.—A retail electric supplier that supplies electricity to the owner or operator of an on-site generating facility shall measure the quantity of electricity produced by the on-site facility and the quantity of electricity consumed by the owner or operator of an on-site generating facility during a billing period in accordance with normal metering practices.
 - "(3) ELECTRICITY SUPPLIED EXCEEDING ELECTRICITY GENERATED.—If the quantity of electricity supplied by a retail electric supplier during a billing period exceeds the quantity of electricity generated by an on-site generating facility and fed back to the electric distribution system during the billing period, the supplier may bill the owner or operator for the net quantity of electricity supplied by the retail electric supplier, in accordance with normal metering practices.
 - "(4) ELECTRICITY GENERATED EXCEEDING ELECTRICITY SUPPLIED.—If the quantity of electricity generated by an on-site generating facility

during a billing period exceeds the quantity of electricity supplied by the retail electric supplier during the billing period—

> "(A) the retail electric supplier may bill the owner or operator of the on-site generating facility for the appropriate charges for the billing period in accordance with paragraph (2); and

> "(B) the owner or operator of the on-site generating facility shall be credited for the excess kilowatt-hours generated during the billing period, with the kilowatt-hour credit appearing on the bill for the following billing period.

"(d) SAFETY AND PERFORMANCE STANDARDS.—

"(1) An eligible on-site generating facility and net metering system used by a retail electric consumer shall meet all applicable safety, performance, reliability, and interconnection standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and Underwriters Laboratories.

"(2) The Commission, after consultation with State regulatory authorities and nonregulated local distribution systems and after notice and opportunity for comment, may adopt, by rule, additional

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1	control and testing requirements for on-site gener-
2	ating facilities and net metering systems that the
3	Commission determines are necessary to protect
4	public safety and system reliability.".
5	SEC. 605. ACCESS TO TRANSMISSION BY INTERMITTENT
6	GENERATORS.
7	Part II of the Federal Power Act (16 U.S.C. 824–
8	824m) is amended by adding at the end the following:
9	"SEC. 217. ACCESS TO TRANSMISSION BY INTERMITTENT
10	GENERATORS.
11	"(a) In General.—The Commission shall ensure
12	that all transmitting utilities provide transmission service
13	to intermittent generators in a manner that does not pe-
14	nalize such generators, directly or indirectly, for charac-
15	teristics that are—
16	"(1) inherent to intermittent energy resources;
17	and
18	(2) are beyond the control of such generators.
19	"(b) Policies.—The Commission shall ensure that
20	the requirement in subsection (a) is met by adopting such
21	policies as it deems appropriate which shall include, but
22	not be limited to, the following:
23	"(1) Subject to the sole exception set forth in
24	paragraph (2), the Commission shall ensure that the
25	rates transmitting utilities charge intermittent gen-

erator customers for transmission services do not directly or indirectly penalize intermittent generator customers for scheduling deviations.

- "(2) The Commission may exempt a transmitting utility from the requirement set forth in subsection (b) if the transmitting utility demonstrates that scheduling deviations by its intermittent generator customers are likely to have a substantial adverse impact on the reliability of the transmitting utility's system. For purposes of administering this exemption, there shall be a rebuttable presumption of no adverse impact where intermittent generators collectively constitute 20 percent or less of total generation interconnected with transmitting utility's system and using transmission services provided by transmitting utility.
- "(3) The Commission shall ensure that to the extent any transmission charges recovering the transmitting utility's embedded costs are assessed to intermittent generators, they are assessed to such generators on the basis of kilowatt-hours generated rather than the intermittent generator's capacity.
- "(4) The Commission shall require transmitting utilities to offer at least to intermittent generators, if not all transmission customers, access to nonfirm

1	transmission service pursuant to long-term contracts
2	of up to ten years duration under reasonable terms
3	and conditions.
4	"(c) Definitions.—In this section:
5	"(1) Intermittent generator.—The term
6	'intermittent generator' means a person that gen-
7	erates electricity using wind or solar energy.
8	"(2) Nonfirm transmission service.—The
9	term 'nonfirm transmission service' means trans-
10	mission service provided on an 'as available' basis.
11	"(3) Scheduling Deviation.—The term
12	'scheduling deviation' means delivery of more or less
13	energy than has previously been forecast in a sched-
14	ule submitted by an intermittent generator to a con-
15	trol area operator or transmitting utility.".
16	TITLE VII—HYDROELECTRIC
17	RELICENSING
18	SEC. 701. ALTERNATIVE CONDITIONS.
19	(a) Alternative Mandatory Conditions.—Sec-
20	tion 4 of the Federal Power Act (16 U.S.C. 797) is
21	amended by adding at the end the following:
22	``(h)(1) Whenever any person applies for a license for
23	any project works within any reservation of the United
24	States under subsection (e), and the Secretary of the de-
25	partment under whose supervision such reservation falls

1	shall deem a condition to such license to be necessary
2	under the first proviso of such section, the license appli-
3	cant may propose an alternative condition.
4	"(2) Notwithstanding the first proviso of subsection
5	(e), the Secretary of the department under whose super-
6	vision the reservation falls shall accept the alternative con-
7	dition proposed by the license applicant, and the Commis
8	sion shall include in the license such alternative condition
9	if the Secretary of the appropriate department determines
10	that the alternative condition—
11	"(A) provides equal or greater protection for
12	the reservation than the condition deemed necessary
13	by the Secretary;
14	"(B) is based on sound science; and
15	"(C) will either—
16	"(i) cost less to implement than the condi-
17	tion deemed necessary by the Secretary, or
18	"(ii) result in less loss of generating capac
19	ity than the condition deemed necessary by the
20	Secretary.".
21	(b) Alternative Fishways.—Section 18 of the
22	Federal Power Act (16 U.S.C. 811) is amended by—
23	(1) inserting "(a)" before the first sentence
24	and
25	(2) adding at the end the following:

1	"(b)(1) Whenever the Commission shall require a li-
2	censee to construct, maintain, or operate a fishway pre-
3	scribed by the Secretary of the Interior or the Secretary
4	of Commerce under this section, the licensee may propose
5	an alternative.
6	"(2) Notwithstanding subsection (a), the Secretary of
7	the Interior or the Secretary of Commerce, as appropriate
8	shall accept and prescribe, and the Commission shall re-
9	quire, the alternative proposed by the licensee, if the Sec-
10	retary of the appropriate department determines that the
11	alternative—
12	"(A) will result in equal or greater fish passage
13	than the fishway initially prescribed by the Sec-
14	retary;
15	"(B) is based on sound science; and
16	"(C) will either—
17	"(i) cost less to implement than the
18	fishway initially prescribed by the Secretary, or
19	"(ii) result in less loss of generating capac-
20	ity than the fishway initially prescribed by the
21	Secretary.".
22	SEC. 702. DISPOSITION OF HYDROELECTRIC CHARGES.
23	(a) Annual Charges.—Section 10(e)(1) of the Fed-
24	eral Power Act (16 U.S.C. 803(e)(1) is amended—

1	(1) by striking "subject to annual appropria-
2	tions Acts" in the first proviso; and
3	(2) by inserting after "(in addition to other
4	funds appropriated for such purposes)" in the first
5	proviso the following: "without further appropria-
6	tion".
7	(b) Other Charges.—Section 17(a) of the Federal
8	Power Act (16 U.S.C. 810(a)) is amended by striking
9	"into the Treasury of the United States and credited to
10	'Miscellaneous receipts'" and inserting the following: "to
11	the Secretary of the department under whose supervision
12	the affected reservation falls, without further appropria-
13	tion, to be used in accordance with subsection (c)".
14	(c) USE OF FUNDS.—Section 17 of the Federal
15	Power Act (16 U.S.C. 810) is further amended by adding
16	at the end the following:
17	"(c)(1) The Secretary receiving a distribution of $12\frac{1}{2}$
18	per centum of the proceeds of charges under subsection
19	(a) may use such proceeds solely for the protection of the
20	water resources on—
21	"(A) the reservation on which the project for
22	which the proceeds were paid is located; or
23	"(B) the reservation on which the headwaters
24	of the waterway, on which the project for which the
25	proceeds were paid, is located.

1	"(2) For purposes of this subsection, activities for the
2	protection of water resources for which proceeds made
3	available under this subsection may be used may only in-
4	clude the following:
5	"(A) promoting the recovery of threatened and
6	endangered species;
7	"(B) road and trail assessments and plans,
8	maintenance, obliteration, or closure;
9	"(C) wildlife and fish habitat management;
10	"(D) multiparty monitoring of water protection
11	activities;
12	"(E) watershed analysis, including resource
13	conditions and trend assessments;
14	"(F) erosion control and restoring hydrologic
15	function to meadows, wetlands, and floodplains; and
16	"(G) job training associated with paragraph
17	(3).
18	"(3) In order to provide employment and job training
19	opportunities to residents of rural communities located
20	within or near a reservation identified in paragraph (1),
21	the Secretary may make grants or enter into cooperative
22	agreements or contracts with—
23	"(A) a private, non-profit, or cooperative entity
24	within the same county as the reservation;

1	"(B) businesses that employ 25 or less employ-
2	ees;
3	"(C) an entity that will hire or train residents
4	of communities located within or near the reserva-
5	tion to perform the contract; or
6	"(D) the Youth Conservation Corps or related
7	partnerships with State, local, or nonprofit youth
8	groups."
9	SEC. 703. RELICENSING STUDY.
10	(a) In General.—The Federal Energy Regulatory
11	Commission shall, in consultation with the Secretary of
12	Commerce, the Secretary of the Interior, and the Sec-
13	retary of Agriculture, conduct a study of all new licensees
14	issued for existing projects under section 15 since January
15	1, 1994.
16	(b) Scope.—The study shall analyze—
17	(1) the length of time the Commission has
18	taken to issue each new license for an existing
19	project;
20	(2) the additional cost to the licensee attrib-
21	utable to new license conditions;
22	(3) the change in generating capacity attrib-
23	utable to new license conditions;
24	(4) the environmental benefits achieved by new
25	license conditions: and

1 (5) litigation arising from the issuance or fail-2 ure to issue new licenses for existing projects under 3 section 15 or the imposition or failure to impose new license conditions. 5 (c) Definition.—As used in this section, the term "new license condition" means any condition imposed 7 under— (1) section 4(e) of the Federal Power Act (16 8 9 U.S.C. 797(e)), 10 (2) section 10(e) of the Federal Power Act (16 11 U.S.C. 803(e)), 12 (3) section 10(j) of the Federal Power Act (16) 13 U.S.C. 803(j)), 14 (4) section 18 of the Federal Power Act (16) 15 U.S.C. 811), or 16 (5) section 401(d) of the Clean Water Act (33) 17 U.S.C. 1341(d)). 18 (d) Consultation.—The Commission shall give interested persons and licensees an opportunity to submit 20 information and views in writing. 21 (e) Report.—The Commission shall report its findings to the Committee on Energy and Natural Resources of the United States Senate and the Committee on Energy

and Commerce of the House of Representatives not later

1	than six months after the date of enactment of this sec-
2	tion.
3	TITLE VIII—COAL
4	SEC. 801. DEFINITIONS.
5	In this title:
6	(1) Cost and Performance Goals.—The
7	term "cost and performance goals" means the cost
8	and performance goals established under section
9	811.
10	(2) Secretary.—The term "Secretary" means
11	the Secretary of Energy.
12	Subtitle A-National Coal-Based
13	Technology Development and
14	Applications Program
15	
	SEC. 811. COST AND PERFORMANCE GOALS.
16	
17	(a) In General.—The Secretary shall perform an
17	(a) In General.—The Secretary shall perform an assessment that identifies costs and associated perform-
17 18	(a) In General.—The Secretary shall perform an assessment that identifies costs and associated performance of technologies that would permit the continued cost-
17 18 19	(a) IN GENERAL.—The Secretary shall perform an assessment that identifies costs and associated performance of technologies that would permit the continued cost-competitive use of coal for electricity generation, as chem-
17 18 19 20	(a) In General.—The Secretary shall perform an assessment that identifies costs and associated performance of technologies that would permit the continued cost-competitive use of coal for electricity generation, as chemical feedstocks, and as transportation fuel in the periods—

1	(b) Consultation.—In establishing the cost and
2	performance goals, the Secretary shall consult with rep-
3	resentatives of—
4	(1) the United States coal industry;
5	(2) State coal development agencies;
6	(3) the electric utility industry;
7	(4) railroads and other transportation indus-
8	tries;
9	(5) manufacturers of equipment using advanced
10	coal technologies;
11	(6) organizations representing workers; and
12	(7) organizations formed to—
13	(A) further the goals of environmental pro-
14	tection;
15	(B) promote the use of coal; or
16	(C) promote the development and use of
17	advanced coal technologies.
18	(c) Timing.—The Secretary shall—
19	(1) not later than 120 days after the date of
20	enactment of this title, issue a set of draft cost and
21	performance goals for public comment; and
22	(2) not later than 180 days after the date of
23	enactment of this title, after taking into consider-
24	ation any public comments received, submit to Con-
25	gress the final cost and performance goals.

SEC. 812. STUDY.

2 (a) In General.—Not later than 1 year aft	er the
---	--------

- 3 date of enactment of this title, the Secretary, in coopera-
- 4 tion with the Secretary of the Interior and the Adminis-
- 5 trator of the Environmental Protection Agency, shall con-
- 6 duct a study to—
- 7 (1) identify technologies capable of achieving
- 8 the cost and performance goals;
- 9 (2) assess the costs that would be incurred by,
- and the period of time that would be required for,
- the development and demonstration of the cost and
- 12 performance goals; and
- 13 (3) develop recommendations for technology de-
- velopment programs, which the Department of En-
- ergy could carry out in cooperation with industry, to
- develop and demonstrate the cost and performance
- 17 goals.
- 18 (b) Cooperation.—In carrying out this section, the
- 19 Secretary shall give due weight to the expert advice of rep-
- 20 resentatives of the entities described in section 811(b).
- 21 SEC. 813. TECHNOLOGY RESEARCH AND DEVELOPMENT
- PROGRAM.
- 23 (a) IN GENERAL.—The Secretary shall carry out a
- 24 program of research on and development, demonstration,
- 25 and commercial application of coal-based technologies

- 1 under the statutory authorities available to him for car-
- 2 rying out research and development.
- 3 (b) CONDITIONS.—The research, development, dem-
- 4 onstration, and commercial application programs identi-
- 5 field in section 812(a) shall be designed to achieve the cost
- 6 and performance goals.
- 7 (c) Report.—Not later than 18 months after the
- 8 date of enactment of this title, the Secretary shall submit
- 9 to the President and Congress a report containing—
- 10 (1) a description of the programs that, as of the
- date of the report, are in effect or are to be carried
- out by the Department of Energy to support tech-
- 13 nologies that are designed to achieve the cost and
- 14 performance goals; and
- 15 (2) recommendations for additional authorities
- required to achieve the cost and performance goals.

17 SEC. 814. AUTHORIZATION OF APPROPRIATIONS.

- 18 (a) In General.—There are authorized to be appro-
- 19 priated to carry out this subtitle \$100,000,000 for each
- 20 of fiscal years 2002 through 2012, to remain available
- 21 until expended.
- 22 (b) Conditions of Authorization.—The author-
- 23 ization of appropriations under subsection (a)—

1	(1) shall be in addition to authorizations of ap-
2	propriations in effect on the date of enactment of
3	this title; and
4	(2) shall not be a cap on Department of Energy
5	fossil energy research and development and clean
6	coal technology appropriations.
7	Subtitle B—Power Plant
8	Improvement Initiative
9	SEC. 821. POWER PLANT IMPROVEMENT INITIATIVE PRO-
10	GRAM.
11	(a) In General.—The Secretary shall carry out a
12	power plant improvement initiative program that will dem-
13	onstrate commercial applications of advanced coal-based
14	technologies applicable to new or existing power plants,
15	including co-production plants, which must advance the ef-
16	ficiency, environmental performance, and cost competitive-
17	ness well beyond that which is in operation or has been
18	demonstrated on the date of enactment of this title.
19	(b) Plan.—Not later than 120 days after the date
20	of enactment of this title, the Secretary shall submit to
21	Congress a plan to carry out subsection (a) that includes
22	a description of—
23	(1) the program elements and management
24	structure to be used;

1 (2) the technical milestones to be achieved with 2 respect to each of the advanced coal-based tech-3 nologies included in the plan; and (3) the demonstration activities proposed to be 5 conducted at new or existing coal-based electric gen-6 eration units having at least 50 megawatts name-

units to achieve 1 or more of the following:

(A) An overall design efficiency improvement of not less than 3 percent as compared with the efficiency of the unit as operated on the date of enactment of this title and before any retrofit, repowering, replacement, or installation.

plate rating, including improvements to allow the

- (B) A significant improvement in the environmental performance related to the control of sulfur dioxide, nitrogen oxide, and mercury in a manner that is different and well below the cost of technologies that are in operation or have been demonstrated on the date of enactment of this title.
- (C) A means of recycling, reusing, or sequestering a significant portion of coal combustion wastes produced by coal-based generating

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1	units excluding practices that are commercially
2	available at the date of enactment of this title.
3	SEC. 822. FINANCIAL ASSISTANCE.
4	(a) In General.—Not later than 180 days after the
5	date on which the Secretary submits to Congress the plan
6	under section 821(b), the Secretary shall solicit proposals
7	for projects at new or existing facilities designed to achieve
8	the levels of performance set forth in section 821(b)(3).
9	(b) Project Criteria.—A solicitation under sub-
10	section (a) may include solicitation of a proposal for a
11	project to demonstrate—
12	(1) the control of emissions of 1 or more pollut-
13	ants; or
14	(2) the production of coal combustion byprod-
15	ucts that are capable of obtaining economic values
16	significantly greater than byproducts produced on
17	the date of enactment of this title.
18	(c) FINANCIAL ASSISTANCE.—The Secretary shall
19	provide financial assistance to projects that—
20	(1) demonstrate overall cost reductions in the
21	utilization of coal to generate useful forms of energy;
22	(2) improve the competitiveness of coal among
23	various forms of energy in order to maintain a diver-
24	sity of fuel choices in the United States to meet elec-
25	tricity generation requirements;

	110
1	(3) achieve, in a cost-effective manner, 1 or
2	more of the criteria described in the solicitation; and
3	(4) demonstrate technologies that are applicable
4	to 25 percent of the electricity generating facilities
5	that use coal as the primary feedstock on the date
6	of enactment of this title.
7	(d) Federal Share.—The Federal share cost of a
8	project funded under this subtitle shall not exceed 50 per-
9	cent.
10	SEC. 823. FUNDING.
11	To carry out this subtitle, the Secretary may use any
12	unobligated funds available to the Secretary and any funds
13	obligated to any project selected under the clean coal tech-
14	nology program that become unobligated.
15	TITLE IX—PRICE-ANDERSON
16	ACT REAUTHORIZATION
17	SEC. 901. SHORT TITLE.
18	This title may be cited as the "Price-Anderson
19	Amendments Act of 2001".
20	SEC. 902. INDEMNIFICATION AUTHORITY.
21	(a) Indemnification of NRC Licensees.—Section
22	170c. of the Atomic Energy Act of 1954 (42 U.S.C.
23	2210(c)) is amended by striking "August 1, 2002" each
24	place it appears and inserting "August 1, 2012".

1	(b) Indemnification of DOE Contractors.—
2	Section 170d.(1)(A) of the Atomic Energy Act of 1954
3	(42 U.S.C. 2210(d)(1)(A)) is amended by striking ", until
4	August 1, 2002,".
5	(c) Indemnification of Nonprofit Educational
6	Institutions.—Section 170k. of the Atomic Energy Act
7	of 1954 (42 U.S.C. 2210(k)) is amended by striking "Au-
8	gust 1, 2002" each place it appears and inserting "August
9	1, 2012".
10	SEC. 903. MAXIMUM ASSESSMENT.
11	Section 170b.(1) of the Atomic Energy Act of 1954
12	(42 U.S.C. 2210(b)(1)) is amended by striking
13	"\$10,000,000" and inserting "\$20,000,000".
14	SEC. 904. DOE LIABILITY LIMIT.
15	(a) Aggregate Liability Limit.—Section 170d. of
16	the Atomic Energy Act of 1954 (42 U.S.C. 2210(d)) is
17	amended by striking subsection (2) and inserting the fol-
18	lowing:
19	"(2) In agreements of indemnification entered
20	into under paragraph (1), the Secretary—
21	"(A) may require the contractor to provide
22	and maintain financial protection of such a type
23	and in such amounts as the Secretary shall de-
24	termine to be appropriate to cover public liabil-

1 ity arising out of or in connection with the con-2 tractual activity, and

"(B) shall indemnify the persons indemnified against such claims above the amount of the financial protection required, in the amount of \$10,000,000,000 (subject to adjustment for inflation under subsection t.), in the aggregate, for all persons indemnified in connection with such contract and for each nuclear incident, including such legal costs of the contractor as are approved by the Secretary.".

12 (b) CONTRACT AMENDMENTS.—Section 170d. of the 13 Atomic Energy Act of 1954 (42 U.S.C. 2210(d)) is further 14 amended by striking subsection (3) and inserting the fol-15 lowing:

"(3) All agreements of indemnification under which the Department of Energy (or its predecessor agencies) may be required to indemnify any person, shall be deemed to be amended, on the date of the enactment of the Price-Anderson Amendments Act of 1999, to reflect the amount of indemnity for public liability and any applicable financial protection required of the contractor under this subsection on such date.".

1 SEC. 905. INCIDENTS OUTSIDE THE UNITED STATES.

- 2 (a) Amount of Indemnification.—Section 170
- 3 d.(5) of the Atomic Energy Act of 1954 (42 U.S.C.
- 4 2210(d)(5)) is amended by striking "\$100,000,000" and
- 5 inserting "\$500,000,000".
- 6 (b) Liability Limit.—Section 170e.(4) of the Atom-
- 7 ic Energy Act of 1954 (42 U.S.C. 2210(e)(4)) is amended
- 8 by striking "\$100,000,000" and inserting
- 9 "\$500,000,000".
- 10 **SEC. 906. REPORTS.**
- 11 Section 170p. of the Atomic Energy Act of 1954 (42)
- 12 U.S.C. 2210(p)) is amended by striking "August 1, 1998"
- 13 and inserting "August 1, 2008".
- 14 SEC. 907. INFLATION ADJUSTMENT.
- 15 Section 170t. of the Atomic Energy Act of 1954 (42)
- 16 U.S.C. 2210(t)) is amended—
- 17 (1) by renumbering paragraph (2) as paragraph
- 18 (3); and
- 19 (2) by adding after paragraph (1) the following
- 20 new paragraph:
- 21 "(2) The Secretary shall adjust the amount of
- indemnification provided under an agreement of in-
- demnification under subsection d. not less than once
- 24 during each 5-year period following the date of the
- enactment of the Price-Anderson Amendments Act

- of 2001, in accordance with the aggregate percent-
- 2 age change in the Consumer Price Index since—
- 3 "(A) such date of enactment, in the case
- 4 of the first adjustment under this subsection; or
- 5 "(B) the previous adjustment under this
- 6 subsection.".

7 SEC. 908. CIVIL PENALTIES.

- 8 (a) Repeal of Automatic Remission.—Section
- 9 234A b.(2) of the Atomic Energy of 1954 (42 U.S.C.
- 10 2282a(b)(2)) is amended by striking the last sentence.
- 11 (b) Limitation for Nonprofit Institutions.—
- 12 Section 234A of the Atomic Energy Act of 1954 (42
- 13 U.S.C. 2282a) is further amended by striking subsection
- 14 d. and inserting the following:
- 15 "d. Notwithstanding subsection a., no contractor,
- 16 subcontractor, or supplier considered to be nonprofit
- 17 under the Internal Revenue Code of 1954 shall be subject
- 18 to a civil penalty under this section in excess of the
- 19 amount of any performance fee paid by the Secretary to
- 20 such contractor, subcontractor, or supplier under the con-
- 21 tract under which the violation or violations; occur.".
- 22 SEC. 909. EFFECTIVE DATE.
- 23 (a) IN GENERAL.—The amendments made by this
- 24 title shall become effective on the date of the enactment
- 25 of this title.

1	(b) Indemnification Provisions.—The amend-
2	ments made by sections 703, 704, and 705 shall not apply
3	to any nuclear incident occurring before the date of the
4	enactment of this title.
5	(c) Civil Penalty Provisions.—The amendments
6	made by section 708 to section 234A of the Atomic En-
7	ergy Act of 1954 (42 U.S.C. 2282a(b)(2)) shall not apply
8	to any violation occurring under a contract entered into
9	before the date of the enactment of this title.
10	DIVISION C—DOMESTIC OIL AND
11	GAS PRODUCTION AND
12	TRANSPORTATION
	TITLE X—OIL AND GAS
13	IIILE A—OIL AND GAS
13 14	PRODUCTION
14	PRODUCTION
14 15	PRODUCTION SEC. 1001. OUTER CONTINENTAL SHELF OIL AND GAS
14 15 16 17	PRODUCTION SEC. 1001. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALE 181.
14 15 16 17	PRODUCTION SEC. 1001. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALE 181. (a) REQUIREMENT.—Subject to applicable laws and regulations, not later than December 31, 2001, the Sec-
14 15 16 17 18	PRODUCTION SEC. 1001. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALE 181. (a) REQUIREMENT.—Subject to applicable laws and regulations, not later than December 31, 2001, the Sec-
14 15 16 17 18	PRODUCTION SEC. 1001. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALE 181. (a) REQUIREMENT.—Subject to applicable laws and regulations, not later than December 31, 2001, the Secretary of the Interior shall proceed with the proposed
14 15 16 17 18 19 20	PRODUCTION SEC. 1001. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALE 181. (a) REQUIREMENT.—Subject to applicable laws and regulations, not later than December 31, 2001, the Secretary of the Interior shall proceed with the proposed Eastern Gulf of Mexico Outer Continental Shelf Oil and
14 15 16 17 18 19 20 21	PRODUCTION SEC. 1001. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALE 181. (a) REQUIREMENT.—Subject to applicable laws and regulations, not later than December 31, 2001, the Secretary of the Interior shall proceed with the proposed Eastern Gulf of Mexico Outer Continental Shelf Oil and Gas Lease Sale 181.
14 15 16 17 18 19 20 21 22 23	PRODUCTION SEC. 1001. OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALE 181. (a) REQUIREMENT.—Subject to applicable laws and regulations, not later than December 31, 2001, the Secretary of the Interior shall proceed with the proposed Eastern Gulf of Mexico Outer Continental Shelf Oil and Gas Lease Sale 181. (b) MODIFICATION.—In carrying out the sale under

- 1 Secretary shall include the 913 blocks in the area that
- 2 is greater than 100 miles from the coast of Florida in
- 3 Lease Sale 181.
- 4 SEC. 1002. FEDERAL ONSHORE LEASING PROGRAMS FOR
- 5 OIL AND GAS.
- 6 Consistent with applicable law and regulations, there
- 7 are authorized to be appropriated to the Secretary of the
- 8 Interior and the Secretary of Agriculture such sums as
- 9 may be necessary, including salary expenses to hire addi-
- 10 tional personnel, to ensure expeditious compliance with
- 11 National Environmental Policy Act requirements applica-
- 12 ble to oil and gas production on public lands and national
- 13 forest system lands.
- 14 SEC. 1003. INCREASING PRODUCTION ON STATE AND PRI-
- 15 VATE LANDS.
- 16 (a) Study.—The Secretary of Energy, in close co-
- 17 ordination with the Interstate Oil and Gas Compact Com-
- 18 mission, shall conduct a study to evaluate the opportuni-
- 19 ties for increasing oil and natural gas production from
- 20 State and privately controlled lands in the United States.
- 21 The study shall take into account trends in land use and
- 22 development that may affect oil and gas development, the
- 23 various leasing practices and rules for development among
- 24 the States, and differences in contract terms from State
- 25 to State and among private landowners. The evaluation

- 1 should also include an assessment of whether optimal re-
- 2 covery practices, including in-fill drilling, work-overs, and
- 3 enhanced recovery operations, are being employed consist-
- 4 ently to ensure the full development and conservation of
- 5 the resources. The evaluation should determine what im-
- 6 pediments may exist to ensuring optimal recovery prac-
- 7 tices and make recommendations as to how those impedi-
- 8 ments could be overcome. The study should also determine
- 9 whether production rights or leases are controlled by par-
- 10 ties no longer interested in fully recovering the resource,
- 11 with inactivity for a period of time being considered as
- 12 indicating a lack of interest.
- 13 (b) Report to Congress and Governors.—Not
- 14 later than 240 days after the date of enactment of this
- 15 section, the Secretary shall provide a report to the Com-
- 16 mittee on Energy and Natural Resources in the Senate,
- 17 and the Committee on Resources in the House of Rep-
- 18 resentatives, summarizing the findings of the study car-
- 19 ried out under subsection (a) and providing recommenda-
- 20 tions for policies or other actions that could help increase
- 21 production on State and private lands. The Secretary shall
- 22 also provide a copy of the report to the Governors of the
- 23 Member States of the Interstate Oil and Compact Com-
- 24 mission.

1 TITLE XI—PIPELINE SAFETY 2 RESEARCH AND DEVELOPMENT

_	
3	SEC. 1101. PIPELINE INTEGRITY RESEARCH AND DEVELOP-
4	MENT.
5	(a) In General.—The Secretary of Transportation,
6	in coordination with the Secretary of Energy, shall develop
7	and implement an accelerated cooperative program of re-
8	search and development to ensure the integrity of natural
9	gas and hazardous liquid pipelines. This research and de-
10	velopment program shall include materials inspection tech-
11	niques, risk assessment methodology, and information sys-
12	tems surety.
13	(b) Purpose.—The purpose of the cooperative re-
14	search program shall be to promote research and develop-
15	ment to—
16	(1) ensure long-term safety, reliability and serv-
17	ice life for existing pipelines;
18	(2) expand capabilities of internal inspection
19	devices to identify and accurately measure defects
20	and anomalies;
21	(3) develop inspection techniques for pipelines
22	that cannot accommodate the internal inspection de-
23	vices available on the date of enactment;

1	(4) develop innovative techniques to measure
2	the structural integrity of pipelines to prevent pipe-
3	line failures;
4	(5) develop improved materials and coatings for
5	use in pipelines;
6	(6) improve the capability, reliability, and prac-
7	ticality of external leak detection devices;
8	(7) identify underground environments that
9	might lead to shortened service life;
10	(8) enhance safety in pipeline siting and land
11	use;
12	(9) minimize the environmental impact of pipe-
13	lines;
14	(10) demonstrate technologies that improve
15	pipeline safety, reliability, and integrity;
16	(11) provide risk assessment tools for opti-
17	mizing risk mitigation strategies; and
18	(12) provide highly secure information systems
19	for controlling the operation of pipelines.
20	(c) Areas.—In carrying out this title, the Secretary
21	of Transportation, in coordination with the Secretary of
22	Energy, shall consider research and development on nat-
23	ural gas, crude oil, and petroleum product pipelines for—
24	(1) early crack, defect, and damage detection,
25	including real-time damage monitoring;

1	(2) automated internal pipeline inspection sen-
2	sor systems;
3	(3) land use guidance and set back manage-
4	ment along pipeline rights-of-way for communities;
5	(4) internal corrosion control;
6	(5) corrosion-resistant coatings;
7	(6) improved cathodic protection;
8	(7) inspection techniques where internal inspec-
9	tion is not feasible, including measurement of struc-
10	tural integrity;
11	(8) external leak detection, including portable
12	real-time video imaging technology, and the advance-
13	ment of computerized control center leak detection
14	systems utilizing real-time remote field data input;
15	(9) longer life, high strength, non-corrosive
16	pipeline materials;
17	(10) assessing the remaining strength of exist-
18	ing pipes;
19	(11) risk and reliability analysis models, to be
20	used to identify safety improvements that could be
21	realized in the near term resulting from analysis of
22	data obtained from a pipeline performance tracking
23	initiative.

1	(12) identification, monitoring, and prevention
2	of outside force damage, including satellite surveil-
3	lance; and
4	(13) any other areas necessary to ensuring the
5	public safety and protecting the environment.
6	(d) Points of Contact.—
7	(1) Designation.—To coordinate and imple-
8	ment the research and development programs and
9	activities authorized under this title—
10	(A) the Secretary of Transportation shall
11	designate, as the point of contact for the De-
12	partment of Transportation, an officer of the
13	Department of Transportation who has been
14	appointed by the President and confirmed by
15	the Senate; and
16	(B) the Secretary of Energy shall des-
17	ignate, as the point of contact for the Depart-
18	ment of Energy, an officer of the Department
19	of Energy who has been appointed by the Presi-
20	dent and confirmed by the Senate.
21	(2) Duties.—(A) The point of contact for the
22	Department of Transportation shall have the pri-
23	mary responsibility for coordinating and overseeing
24	the implementation of the research, development,

- 1 and demonstration program plan, as defined in sub-2 sections (e) and (f).
- 3 (B) The points of contact shall jointly assist in
- 4 arranging cooperative agreements for research, de-
- 5 velopment, and demonstration involving their respec-
- 6 tive Departments, national laboratories, universities,
- 7 and industry research organizations.
- 8 (e) Research and Development Program
- 9 Plan.—Within 240 days after the date of enactment of
- 10 this Act, the Secretary of Transportation, in coordination
- 11 with the Secretary of Energy and the Pipeline Integrity
- 12 Technical Advisory Committee, shall prepare and submit
- 13 to the Congress a 5-year program plan to guide activities
- 14 under this Act. In preparing the program plan, the Sec-
- 15 retary of Transportation shall consult with appropriate
- 16 representatives of the natural gas, crude oil, and petro-
- 17 leum product pipeline industries to select and prioritize
- 18 appropriate project proposals. The Secretary may also
- 19 seek the advice of utilities, manufacturers, institutions of
- 20 higher learning, Federal agencies, the pipeline research in-
- 21 stitutions, national laboratories, State pipeline safety offi-
- 22 cials, environmental organizations, pipeline safety advo-
- 23 cates, and professional and technical societies.
- 24 (f) Implementation.—The Secretary of Transpor-
- 25 tation shall have primary responsibility for ensuring the

- 1 five-year plan provided for in subsection (e) is imple-
- 2 mented as intended by this Act. In carrying out the re-
- 3 search, development, and demonstration activities under
- 4 this Act, the Secretary of Transportation and the Sec-
- 5 retary of Energy may use, to the extent authorized under
- 6 applicable provisions of law, contracts, cooperative agree-
- 7 ments, cooperative research and development agreements
- 8 under the Stevenson-Wydler Technology Innovation Act of
- 9 1980 (15 U.S.C. 3701 et seq.), grants, joint ventures,
- 10 other transactions, and any other form of agreement avail-
- 11 able to the Secretary consistent with the recommendations
- 12 of the Advisory Committee.
- 13 (g) Reports to Congress.—The Secretary of
- 14 Transportation shall report to the Congress annually as
- 15 to the status and results to date of the implementation
- 16 of the research and development program plan. The report
- 17 shall include the activities of the Department of Transpor-
- 18 tation, the Department of Energy, the national labora-
- 19 tories, universities, and any other research organizations,
- 20 including industry research organizations.
- 21 SEC. 1102. PIPELINE INTEGRITY TECHNICAL ADVISORY
- 22 **COMMITTEE.**
- 23 (a) Establishment.—The Secretary of Transpor-
- 24 tation shall enter into appropriate arrangements with the
- 25 National Academy of Sciences to establish and manage the

- 1 Pipeline Integrity Technical Advisory Committee for the
- 2 purpose of advising the Secretary of Transportation and
- 3 the Secretary of Energy on the development and imple-
- 4 mentation of the five-year research, development, and
- 5 demonstration program plan as defined in section 1101(e).
- 6 The Advisory Committee shall have an ongoing role in
- 7 evaluating the progress and results of the research, devel-
- 8 opment, and demonstration carried out under this title.
- 9 (b) Membership.—The National Academy of
- 10 Sciences shall appoint the members of the Pipeline Integ-
- 11 rity Technical Advisory Committee after consultation with
- 12 the Secretary of Transportation and the Secretary of En-
- 13 ergy. Members appointed to the Advisory Committee
- 14 should have the necessary qualifications to provide tech-
- 15 nical contributions to the purposes of the Advisory Com-
- 16 mittee.

17 SEC. 1103. AUTHORIZATION OF APPROPRIATIONS.

- 18 (a) There are authorized to be appropriated to the
- 19 Secretary of Transportation for carrying out this title
- 20 \$3,000,000, which is to be derived from user fees (49
- 21 U.S.C. 60125), for each of the fiscal years 2002 through
- 22 2006.
- 23 (b) Of the amounts available in the Oil Spill Liability
- 24 Trust Fund (26 U.S.C. 9509), \$3,000,000 shall be trans-
- 25 ferred to the Secretary of Transportation to carry out pro-

- 1 grams for detection, prevention, and mitigation of oil spills
- 2 authorized in this title for each of the fiscal years 2002
- 3 through 2006.
- 4 (c) There are authorized to be appropriated to the
- 5 Secretary of Energy for carrying out this title such sums
- 6 as may be necessary for each of the fiscal years 2002
- 7 through 2006.

8 DIVISION D—DIVERSIFYING EN-

9 ERGY DEMAND AND IMPROV-

10 **ING EFFICIENCY**

11 TITLE XII—VEHICLES

- 12 SEC. 1201. VEHICLE FUEL EFFICIENCY.
- 13 (a) Requirement.—The Secretary of Transpor-
- 14 tation, in consultation with the Secretary of Energy and
- 15 the Administrator of the Environmental Protection Agen-
- 16 cy, shall develop and implement mechanisms to increase
- 17 fuel efficiency of light-duty vehicles to limit total demand
- 18 for petroleum products by light-duty vehicles in the year
- 19 2008 and thereafter to no more than 105 percent of the
- 20 consumption by such vehicles in the year 2000.
- 21 (b) Negotiations.—Upon completion of the study
- 22 of the National Academy of Sciences on the effectiveness
- 23 and impact of corporate average fuel economy standards,
- 24 and taking into account its findings, the Secretary of
- 25 Transportation, in coordination with the Secretary of En-

- 1 ergy and the Administrator of the Environmental Protec-
- 2 tion Agency, shall negotiate with the manufacturers of
- 3 automobiles sold in the United States enforceable mecha-
- 4 nisms to increase vehicle efficiency or provide vehicle alter-
- 5 natives to meet the petroleum demand target in subsection
- 6 (a) while ensuring consumers reliable and affordable
- 7 transportation services.
- 8 (c) Rules.—Upon completion of the negotiations
- 9 under subsection (b) and, in any event, not later than 18
- 10 months after the date of enactment of this section, the
- 11 Secretary of Transportation shall establish, by rule—
- 12 (1) the enforceable mechanisms agreed to under
- subsection (b); or
- 14 (2) if enforceable mechanism cannot be agreed
- on under subsection (b), specific fuel economy regu-
- lations to meet the petroleum demand targets under
- subsection (a).
- 18 (d) Analyses and Reports to Congress.—The
- 19 Department of Energy shall assist the Secretary of Trans-
- 20 portation by carrying out analyses of recommended poli-
- 21 cies or combinations of policies to determine if the petro-
- 22 leum demand target in subsection (a) is likely to be met.
- 23 Once enforceable mechanisms are adopted under sub-
- 24 section (b), the Secretary of Energy shall track progress
- 25 towards meeting the petroleum demand target and shall

- 1 report to Congress three years after the date of enactment
- 2 of this section, and every two years thereafter until the
- 3 year 2008, on the Secretary of Energy's determination as
- 4 to whether the mechanisms are effectively meeting the pe-
- 5 troleum demand target. If the Secretary of Energy deter-
- 6 mines that the mechanisms are not effectively meeting the
- 7 target, then the Secretary shall recommend in the report
- 8 to Congress on further policies that may be required to
- 9 meet the target.

10

11

12

13

16

- (e) Definitions.—In this section:
- (1) Light-duty vehicles.—The term "light duty vehicles" includes passenger automobiles, in addition to all light trucks and sport utility vehicles
- marketed as passenger vehicles, regardless of weight.
- 15 (2) MECHANISMS.—The term "mechanisms" in-
- economy, alternatives to the current fuel economy

cludes stronger standards for corporate average fuel

- economy, alternatives to the current fuel economy
- standards such as combining cars and light trucks
- for the purpose of fuel economy regulation, specific
- fuel efficiency standards by vehicle class, tax incen-
- 21 tives for highly efficient or alternative fuel vehicles,
- 22 updating and expanding the scope of the current gas
- 23 guzzler tax program, and new programs to promote
- the purchase of high efficiency and alternative fuel
- vehicles or early retirement of inefficient vehicles.

1	SEC. 1202. INCREASED USE OF ALTERNATIVE FUELS BY
2	FEDERAL FLEETS.
3	(a) Requirement To Use Alternative Fuels.—
4	Section 400AA(a)(3)(E) of the Energy Policy and Con-
5	servation Act (42 U.S.C. $6374(a)(3)(E)$) is amended to
6	read as follows:
7	"(E) Dual fueled vehicles acquired pursu-
8	ant to this section shall be operated on alter-
9	native fuels. If the Secretary determines that all
10	dual fueled vehicles acquired pursuant to this
11	section cannot operate on alternative fuels at all
12	times, he may waive the requirement in part,
13	but only to the extent that—
14	"(i) not later than September 30,
15	2003, not less than 50 percent of the total
16	annual volume of fuel used in such dual
17	fueled vehicles shall be from alternative
18	fuels; and
19	"(ii) not later than September 30,
20	2005, not less than 75 percent of the total
21	annual volume of fuel used in such dual
22	fueled vehicles shall be from alternative
23	fuels.".
24	(b) Section $400\mathrm{AA}(\mathrm{g})(4)(\mathrm{B})$ of the Energy Policy and
25	Conservation Act (42 U.S.C. $6374(g)(4)(B)$) is amended
26	by adding, after the words, "solely on alternative fuel",

1	", including a three-wheeled enclosed electric vehicle hav-
2	ing a vehicle identification number".
3	SEC. 1203. EXCEPTION TO HOV PASSENGER REQUIRE-
4	MENTS FOR ALTERNATIVE FUEL VEHICLES.
5	Section 102(a)(1) of title 23, United States Code, is
6	amended by inserting after "required" the following: "(un-
7	less, in the discretion of the State transportation depart-
8	ment, the vehicle is being operated on, or is being fueled
9	by, an alternative fuel (as defined in section 301(2) of the
10	Energy Policy Act of 1992 (42 U.S.C. 13211(2))))".
11	TITLE XIII—FACILITIES
12	SEC. 1301. FEDERAL ENERGY BANK.
13	(a) Definitions.—In this section:
14	(1) Agency.—The term "agency" means—
15	(A) an Executive agency (as defined in sec-
16	tion 105 of title 5, United States Code, except
17	that the term also includes the United States
18	Postal Service);
19	(B) Congress and any other entity in the
20	legislative branch; and
21	(C) a court and any other entity in the ju-
22	dicial branch.
23	(2) Bank.—The term "Bank" means the Fed-
24	eral Energy Bank established by subsection (b).

1	(3) Energy efficiency project.—The term
2	"energy efficiency project" means a project that as-
3	sists an agency in meeting or exceeding the energy
4	efficiency goals stated in—
5	(A) part 3 of title V of the National En-
6	ergy Conservation Policy Act (42 U.S.C. 8251
7	et seq.);
8	(B) subtitle F of title I of the Energy Pol-
9	icy Act of 1992; and
10	(C) applicable Executive orders, including
11	Executive Order Nos. 12759 and 12902.
12	(4) Secretary.—The term "Secretary" means
13	the Secretary of Energy.
14	(5) TOTAL UTILITY PAYMENTS.—The term
15	"total utility payments" means payments made to
16	supply electricity, natural gas, and any other form
17	of energy to provide the heating, ventilation, and air
18	conditioning, lighting, and other energy needs of an
19	agency facility.
20	(b) Establishment of Bank.—
21	(1) IN GENERAL.—There is established in the
22	Treasury of the United States a trust fund to be
23	known as the "Federal Energy Bank", consisting
24	of—

1	(A) such amounts as are appropriated to
2	the Bank under subsection (f);
3	(B) such amounts as are transferred to the
4	Bank under paragraph (2);
5	(C) such amounts as are repaid to the
6	Bank under subsection (c)(2)(D); and
7	(D) any interest earned on investment of
8	amounts in the Bank under paragraph (3).
9	(2) Transfers to bank.—
10	(A) IN GENERAL.—At the beginning of
11	each of fiscal years 2002, 2003, and 2004, each
12	agency shall transfer to the Secretary of the
13	Treasury, for deposit in the Bank, an amount
14	equal to 5 percent of the total utility payments
15	paid by the agency in the preceding fiscal year.
16	(B) Utilities paid for as part of
17	RENTAL PAYMENTS.—The Secretary shall by
18	regulation establish a formula by which the ap-
19	propriate portion of a rental payment that cov-
20	ers the cost of utilities shall be considered to be
21	a utility payment for the purposes of subpara-
22	graph (A).
23	(3) Investment of funds.—The Secretary of
24	the Treasury shall invest such portion of funds in
25	the Bank as is not, in the Secretary's judgment, re-

1	quired to meet current withdrawals. Investments
2	may be made only in interest-bearing obligations of
3	the United States.
4	(c) Loans From the Bank.—
5	(1) In general.—The Secretary of the Treas-
6	ury shall transfer from the Bank to the Secretary
7	such amounts as are appropriated to carry out the
8	loan program under paragraph (2).
9	(2) Loan Program.—
10	(A) IN GENERAL.—In accordance with
11	subsection (d), the Secretary shall establish a
12	program to loan amounts from the Bank to any
13	agency that submits an application satisfactory
14	to the Secretary in order to finance an energy
15	efficiency project.
16	(B) Performance contracting fund-
17	ING.—To the extent practicable, an agency shall
18	not submit a project for which performance
19	contracting funding is available.
20	(C) Purposes of loan.—
21	(i) In general.—A loan under this
22	section may be made to pay the costs of—
23	(I) an energy efficiency project;
24	\mathbf{or}

1	(II) development and administra-
2	tion of a performance contract.
3	(ii) Limitation.—An agency may use
4	not more than 15 percent of the amount of
5	a loan under clause (i)(I) to pay the costs
6	of administration and proposal develop-
7	ment (including data collection and energy
8	surveys).
9	(D) Repayments.—
10	(i) IN GENERAL.—An agency shall
11	repay to the Bank the principal amount of
12	the energy efficiency project loan plus in-
13	terest at a rate determined by the Presi-
14	dent, in consultation with the Secretary
15	and the Secretary of the Treasury.
16	(ii) WAIVER.—The Secretary may
17	waive the requirement of clause (i) if the
18	Secretary determines that payment of in-
19	terest by an agency is not required to sus-
20	tain the needs of the Bank in making en-
21	ergy efficiency project loans.
22	(E) AGENCY ENERGY BUDGETS.—Until a
23	loan is repaid, an agency budget submitted to
24	Congress for a fiscal year shall not be reduced
25	by the value of energy savings accrued as a re-

1	sult of the energy conservation measure imple-
2	mented with funds from the Bank.
3	(F) AVAILABILITY OF FUNDS.—An agency
4	shall not rescind or reprogram funds made
5	available by this Act. Funds loaned to an agen-
6	cy shall be retained by the agency until ex-
7	pended, without regard to fiscal year limitation.
8	(d) Selection Criteria.—
9	(1) In general.—The Secretary shall establish
10	criteria for the selection of energy efficiency projects
11	to be awarded loans in accordance with paragraph
12	(2).
13	(2) Selection Criteria.—The Secretary may
14	make loans only for energy efficiency projects that—
15	(A) are technically feasible;
16	(B) are determined to be cost-effective
17	using life cycle cost methods established by the
18	Secretary by regulation;
19	(C) include a measurement and manage-
20	ment component to—
21	(i) commission energy savings for new
22	Federal facilities; and
23	(ii) monitor and improve energy effi-
24	ciency management at existing Federal fa-
25	cilities; and

1	(D) have a project payback period of 7
2	years or less.
3	(e) Reports and Audits.—
4	(1) Reports to the secretary.—Not later
5	than 1 year after the installation of an energy effi-
6	ciency project that has a total cost of more than
7	\$1,000,000, and each year thereafter, an agency
8	shall submit to the Secretary a report that—
9	(A) states whether the project meets or
10	fails to meet the energy savings projections for
11	the project; and
12	(B) for each project that fails to meet the
13	savings projections, states the reasons for the
14	failure and describes proposed remedies.
15	(2) Audits.—The Secretary may audit any en-
16	ergy efficiency project financed with funding from
17	the Bank to assess the project's performance.
18	(3) Reports to congress.—At the end of
19	each fiscal year, the Secretary shall submit to Con-
20	gress a report on the operations of the Bank, includ-
21	ing a statement of the total receipts into the Bank,
22	and the total expenditures from the Bank to each
23	agency.

1	(f) Authorization of Appropriations.—There
2	are authorized to be appropriated such sums as are nec-
3	essary to carry out this section.
4	SEC. 1302. INCENTIVES FOR ENERGY EFFICIENT SCHOOLS.
5	(a) Establishment.—There is established in the
6	Department of Education the High Performance Schools
7	Program (hereafter in this section referred to as the "Pro-
8	gram'').
9	(b) Grants.—The Secretary of Education may make
10	grants to State educational agencies—
11	(1) to assist schools in achieving energy effi-
12	ciency performance not less than 30 percent below
13	the least efficient levels, as measured over the full
14	fuel cycle, permitted under the 1998 International
15	Energy Conservation Code as it is in effect for new
16	construction and existing buildings;
17	(2) to administer the Program; and
18	(3) to promote participation in the Program.
19	(c) Grants To Assist School Districts.—Grants
20	under subsection (b)(1) shall be used for schools that—
21	(1) have demonstrated a need for such grants
22	in order to respond appropriately to increasing ele-
23	mentary and secondary school enrollments or to
24	make major investments in renovation of school fa-
25	cilities:

1	(2) have demonstrated that the districts do not
2	have adequate funds to respond appropriately to
3	such enrollments or achieve such investments with-
4	out assistance;
5	(3) have made a commitment to use the grant
6	funds to develop high performance school buildings
7	in accordance with a plan that the State educational
8	agency, in consultation with the State energy office,
9	has determined is feasible and appropriate to achieve
10	the purposes for which the grant is made.
11	(d) Grants for Administration.—Grants under
12	subsection (b)(2) shall be used to—
13	(1) evaluate compliance by schools with require-
14	ments of this section;
15	(2) distribute information and materials to
16	clearly define and promote the development of high
17	performance school buildings for both new and exist-
18	ing facilities;
19	(3) organize and conduct programs for school
20	board members, school personnel, architects, engi-
21	neers, and others to advance the concepts of high
22	performance school buildings;
23	(4) obtain technical services and assistance in
24	planning and designing high performance school
25	buildings; or

1	(5) collect and monitor data and information
2	pertaining to the high performance school building
3	projects.
4	(e) Grants To Promote Participation.—Grants
5	under subsection (b)(3) shall be used for promotional and
6	marketing activities, including facilitating private and
7	public financing, promoting the use of energy service com-
8	panies, working with school administrations, students, and
9	communities, and coordinating public benefit programs.
10	(f) Supplementing Grant Funds.—The State
11	educational agency shall encourage qualifying schools to
12	supplement funds awarded pursuant to this section with
13	funds from other sources in the implementation of their
14	plans.
15	(g) Purposes.—Except as provided in subsection
16	(h), funds appropriated to carry out this section shall be
17	allocated as follows:
18	(1) 70 percent shall be used to make grants
19	under subsection $(b)(1)$.
20	(2) 15 percent shall be used to make grants
21	under subsection $(b)(2)$.
22	(3) 15 percent shall be used to make grants
23	under subsection (b)(3).
24	(h) Other Funds.—The Secretary of Education
25	may retain an amount, not to exceed \$300,000 per year,

- 1 to assist State educational agencies designated in coordi-
- 2 nating and implementing the Program. Such funds may
- 3 be used to develop reference materials to further define
- 4 the principles and criteria to achieve high performance
- 5 school buildings.
- 6 (i) AUTHORIZATION OF APPROPRIATIONS.—For
- 7 grants under subsection (b) there are authorized to be
- 8 appropriated—
- 9 (1) \$200,000,000 for fiscal year 2002,
- 10 (2) \$210,000,000 for fiscal year 2003,
- 11 (3) \$220,000,000 for fiscal year 2004,
- 12 (4) \$230,000,000 for fiscal year 2005, and
- 13 (5) such sums as may be necessary for each of 14 the subsequent 6 fiscal years.
- 15 (j) Definitions.—For purposes of this section:
- 16 (1) High Performance School Building.—
- 17 The term "high performance school building" refers
- to a school building that, in its design, construction,
- operation, and maintenance, maximizes use of re-
- 20 newable energy, direct use of environmentally clean
- 21 fossil fuels for supplementary space conditioning and
- 22 water heating and energy conservation practices,
- represents the most cost-effective alternatives on a
- 24 life-cycle basis considering energy price forecasts
- 25 from the U.S. Energy Information Administration,

1	uses affordable, environmentally preferable, durable
2	materials, enhances indoor environmental quality,
3	protects and conserves water, and optimizes site po-
4	tential.
5	(2) Renewable energy.—The term "renew-
6	able energy" means energy produced by solar, wind,
7	geothermal, hydropower, and biomass power.
8	(3) School.—The term "school" means—
9	(A) an "elementary school" as that term is
10	defined in section 14101(14) of the Elementary
11	and Secondary Education Act of 1965 (20
12	U.S.C. 8801(14)),
13	(B) a "secondary school" as that term is
14	defined in section 14101(25) of the Elementary
15	and Secondary Education Act of 1965 (20
16	U.S.C. 8801(25)), or
17	(C) an elementary or secondary Indian
18	school funded by the Bureau of Indian Affairs.
19	(4) State educational agency.—The term
20	"State educational agency" has the same meaning
21	given such term in section 14101(28) of the Elemen-
22	tary and Secondary Education Act of 1965 (20
23	U.S.C. 8801(28)).

1 SEC. 1303. VOLUNTARY COMMITMENTS TO REDUCE INDUS-

- 2 TRIAL ENERGY INTENSITY.
- 3 (a) Voluntary Agreements.—The Secretary of
- 4 Energy shall enter into voluntary agreements with one or
- 5 more persons in industrial sectors that consume signifi-
- 6 cant amounts of primary energy per unit of physical out-
- 7 put to reduce the energy intensity of their production ac-
- 8 tivities.
- 9 (b) GOAL.—Voluntary agreements under this section
- 10 shall have a goal of reducing energy intensity by not less
- 11 than 1 percent each year from 2002 through 2012.
- 12 (c) Recognition.—The Secretary of Energy, in co-
- 13 operation with other appropriate federal agencies, shall de-
- 14 velop mechanisms to recognize and publicize the commit-
- 15 ments made by participants in voluntary agreements
- 16 under this section.
- 17 (d) Definition.—In this section, the term "energy
- 18 intensity' means the primary energy consumed per unit
- 19 of physical output in an industrial process.

1	DIVISION E—ENHANCING
2	RESEARCH, DEVELOPMENT,
3	AND TRAINING
4	TITLE XIV—RESEARCH AND
5	DEVELOPMENT PROGRAMS
6	SEC. 1401. SHORT TITLE AND FINDINGS.
7	(a) Short Title.—This title may be cited as "En-
8	ergy Science and Technology Enhancement Act".
9	(b) FINDINGS.—
10	(1) A coherent strategy for ensuring a diverse
11	national energy supply requires an energy research
12	and development program that supports basic energy
13	research and provides mechanisms to develop, dem-
14	onstrate, and deploy new energy technologies in
15	partnership with industry.
16	(2) Federal budget authority for energy re-
17	search and development, measured in constant 1992
18	dollars, has declined roughly three-fourths from
19	about \$6 billion in 1980 to \$1.5 billion in 2000.
20	(3) According to the Energy Information Ad-
21	ministration, an aggressive national energy research
22	development, and technology deployment program
23	can—

1	(A) result in United States energy inten-
2	sity declines of 1.9 percent per year from 1999
3	to 2020;

- (B) reduce United States energy consumption in 2020 by 8 quadrillion Btu from otherwise expected levels; and
- (C) reduce carbon dioxide emissions from expected levels of 166 million metric tons in carbon equivalent in 2020.
- (4) An aggressive national energy research, development, and technology deployment program can also help maintain domestic United States production of energy. As one example, such a program could increase the success rates of finding and drilling for oil and natural gas, and thereby increase United States hydrocarbon reserves in 2020 by 14 percent over otherwise expected levels, and contributing to natural gas prices in 2020 that would be 20 percent lower than otherwise expected.
- (5) An aggressive national energy research, development, and technology deployment program is needed if United States suppliers and manufacturers are to compete in future markets for advanced energy technologies. Vehicles based on advanced energy technologies in automotive applications could

1	account, for example, for nearly 17 percent of all
2	light-duty vehicle sales by 2020 displacing 203,000
3	oil barrels a day equivalent.
4	(6) To achieve these results across a broad
5	range of sources of energy supply and energy end-
6	uses, a comprehensive and balanced energy research,
7	development, and technology deployment program
8	must be supported by the Department of Energy.
9	SEC. 1402. ENHANCED ENERGY EFFICIENCY RESEARCH
10	AND DEVELOPMENT.
11	(a) Goals.—It is the sense of Congress that a bal-
12	anced energy research, development, and deployment pro-
13	gram to enhance energy efficiency should have the fol-
14	lowing goals:
15	(1) For energy efficiency in housing, the pro-
16	gram should develop technologies, housing compo-
17	nents, designs and production methods that will, by
18	2010—
19	(A) reduce the time needed to move tech-
20	nologies to market by 50 percent,
21	(B) reduce the monthly cost of new hous-
22	ing by 20 percent,
23	(C) cut the environmental impact and en-
24	ergy use of new housing by 50 percent, and

1	(D) reduce energy use in 15 million exist-
2	ing homes by 30 percent, and
3	(E) improve durability and reduce mainte-
4	nance costs by 50 percent.
5	(2) For industrial energy efficiency, the pro-
6	gram should, in cooperation with the affected
7	industries—
8	(A) develop a microturbine (40 to 300 kilo-
9	watt) that is more than 40 percent efficient by
10	2006,
11	(B) develop a microturbine that is more
12	than 50 percent efficient by 2010,
13	(C) develop advanced materials for com-
14	bustion systems that reduce emissions of nitro-
15	gen oxides by 30 to 50 percent while increasing
16	efficiency 5 to 10 percent by 2007, and
17	(D) improve the energy intensity of the
18	major energy-consuming industries by at least
19	25 percent by 2010.
20	(3) For transportation energy efficiency, the
21	program should, in cooperation with affected
22	industries—
23	(A) develop an 80-mile-per-gallon produc-
24	tion prototype passenger automobile by 2004,

1	(B) develop a heavy truck (Classes 7 and
2	8) with ultra low emissions and the ability to
3	use an alternative fuel that has an average fuel
4	economy of—
5	(i) 10 miles per gallon by 2007, and
6	(ii) 13 miles per gallon by 2010,
7	(C) develop a production prototype of a
8	passenger automobile with zero equivalent emis-
9	sions that has an average fuel economy of 100
10	miles per gallon by 2010, and
11	(D) improve, by 2010, the average fuel
12	economy of trucks—
13	(i) in Classes 1 and 2 by 300 percent,
14	and
15	(ii) in Classes 3 through 6 by 200
16	percent.
17	(b) Definition.—For purposes of subsection (a)(2),
18	the term "major energy consuming industries" means—
19	(1) the forest product industry,
20	(2) the steel industry,
21	(3) the aluminum industry,
22	(4) the metal casting industry,
23	(5) the chemical industry,
24	(6) the petroleum refining industry, and
25	(7) the glass-making industry.

1	(c) Authorization of Appropriations.—There
2	are authorized to be appropriated to the Secretary of En-
3	ergy for operating expenses and capital equipment for re-
4	search, development, demonstration, and initial deploy-
5	ment assistance activities related to energy efficiency re-
6	search and development including state and local grants
7	and the federal energy management program—
8	(1) \$879,000,000 for fiscal year 2002;
9	(2) \$948,000,000 for fiscal year 2003;
10	(3) \$1,024,000,000 for fiscal year 2004;
11	(4) \$1,106,000,000 for fiscal year 2005; and
12	(5) \$1,195,000,000 for fiscal year 2006.
13	(d) Special Projects in Energy-Efficient
14	Transmission.—From amounts authorized under this
15	section, the Secretary of Energy shall make not more than
16	3 awards for projects demonstrating the use of advanced
17	technology—
18	(1) to construct a bulk electricity transmission
19	line of not less than 35 miles based on wire fab-
20	ricated from superconducting materials; and
21	(2) to provide a 20 percent increase in the aver-
22	age efficiency in electricity transmission systems in
23	rural and remote areas.

1 SEC. 1403. ENHANCED RENEWABLE ENERGY RESEARCH 2 AND DEVELOPMENT.

- 3 (a) Goals.—It is the sense of Congress that a bal-4 anced energy research, development, and deployment pro-5 gram to enhance renewable energy should have the fol-6 lowing goals.
- 10 (1) For wind power, the program should reduce
 the cost of wind electricity by 50 percent by 2006,
 so that wind power can be widely competitive with
 fossil-fuel-based electricity in a restructured electric
 industry, with concentration within the program on
 a variety of advanced wind turbine concepts and
 manufacturing technologies.
 - (2) For photovoltaics, the programs should pursue research and development that would lead to photovoltaic systems prices of \$3,000 per kilowatt in 2003 and \$1,500 per kilowatt by 2006. Program activities should include assisting industry in developing manufacturing technologies, giving greater attention to balance of system issues, and expanding fundamental research on relevant advanced materials.
 - (3) For solar thermal electric systems the program should strengthen ongoing research and development combining high-efficiency and high-temperature receivers with advanced thermal storage and

- power cycles, with the goal of making solar-only power (including baseload solar power) widely competitive with fossil fuel power by 2015.
 - (4) For biomass-based power systems, the program should enable commercialization, within five years, integrated power-generating technologies that employ gas turbines and fuel cells integrated with biomass gasifiers. The program should embrace an interagency bioenergy framework to triple United States bioenergy use by 2010.
 - (5) For geothermal energy, the programs should continue work on hydrothermal systems, and reactivate research and development on advanced concepts, giving top priority to high-grade hot dryrock geothermal energy. This technology offers the long-term potential, with advanced drilling and reservoir exploitation technology, of providing heat and baseload electricity in most areas of the United States.
 - (6) For biofuels, the program should accelerate research and development on advanced enzymatic hydrolysis technology for making ethanol from cellulosic feedstock, with the goal that between 2010 and 2015 ethanol produced from energy crops would be fully competitive in terms of price with gasoline

- as a neat fuel, in either internal combustion engine or fuel cell vehicles. The programs should coordinate this development with the biopower program so as to co-optimize the production of ethanol from the carbohydrate fractions of the biomass and electricity from the lighting using advanced biopower technology using a suite of integrated systems from gas turbines to fuel cells.
 - (7) For hydrogen-based energy systems, the program should support research and development on hydrogen-using and hydrogen-producing technologies. The programs should also coordinate hydrogen-using technology development with proton-exchange-membrane fuel-cell vehicle development activities under the enhanced energy efficiency program in section 1002.
 - (8) For hydropower, the program should provide a new generation of turbine technologies that are less damaging to fish and aquatic ecosystems. By deploying such technologies at existing dams and in new low-head, run-of-river applications, as much as an additional 50,000 MW could be possible by 2020.
 - (9) For electric energy and storage, the program should develop a high capacity super-

- 1 conducting transmission lines, generators, and de-
- 2 velop distributed generating systems to accommo-
- date multiple types of energy sources under a com-
- 4 mon interconnect standard.
- 5 (b) AUTHORIZATION OF APPROPRIATIONS.—There
- 6 are authorized to be appropriated to the Secretary of En-
- 7 ergy for operating expenses and capital equipment for re-
- 8 search, development, demonstration, and initial deploy-
- 9 ment assistance activities related to solar and renewable
- 10 resources technologies, under the Office of Energy Effi-
- 11 ciency and Renewable Energy, as follows:
- 12 (1) \$419,500,000 for fiscal year 2002;
- 13 (2) \$468,000,000 for fiscal year 2003;
- 14 (3) \$523,000,000 for fiscal year 2004;
- 15 (4) \$583,000,000 for fiscal year 2005; and
- 16 (5) \$652,000,000 for fiscal year 2006.
- 17 (c) Special Projects in Renewable Energy.—
- 18 From amounts authorized under this section, the Sec-
- 19 retary of Energy shall make not more than 3 awards for
- 20 projects demonstrating the use of advanced wind energy
- 21 technology to assist in delivering electricity in rural and
- 22 remote locations. The Secretary may provide financial as-
- 23 sistance to rural electric cooperatives and other rural enti-
- 24 ties seeking to submit proposals for such projects.

1	SEC. 1404. ENHANCED FOSSIL ENERGY RESEARCH AND DE-
2	VELOPMENT.
3	(a) Goals.—It is the sense of Congress that a bal-
4	anced energy research, development, and deployment pro-
5	gram to enhance renewable energy should have the fol-
6	lowing goals:
7	(1) For core fossil energy research and develop-
8	ment, the program should achieve the goals outlined
9	by the Department of Energy's Vision 21 program
10	for fossil energy research. This research should aim
11	towards increased efficiency of the combined cycle
12	using high temperature fuel cells, advanced gasifi-
13	cation technologies for coal and biomass to produce
14	power and clean fuels. The program should include
15	a carbon dioxide based sequestration program to
16	help reduce global warming.
17	(2) For offshore oil and natural gas resources,
18	the program should investigate and develop tech-
19	nologies to—
20	(A) extract methane hydrates in coastal
21	waters of the United States, and
22	(B) develop natural gas and oil reserves in
23	the ultra-deepwater of the Central and Western
24	Gulf of Mexico. Research and development on
25	ultra-deepwater resource recovery shall focus on

improving the safety and efficiency of such re-

- covery and of sub-sea production technology
 used for such recovery, while lowering costs.
- 3 (3) For transportation fuels, the program 4 should support a comprehensive transportation fuels 5 strategy to increase the price elasticity of oil supply 6 and demand by focusing research on reducing the 7 cost of producing transportation fuels from natural 8 gas and indirect liquefaction of coal and biomass.
- 9 (b) Study.—The Secretary of Energy, in consulta-10 tion with the Secretary of the Interior, the Administrator of the Environmental Protection Agency and affected in-11 12 dustries (including electric utilities, electrical equipment manufacturers, and organizations representing electrical workers) should conduct a study to identify technologies 14 15 and a research program that would permit the cost-competitive use of coal for electricity generation through 2020 16 while furthering national environmental goals. 17
- 18 (c) Authorization of Appropriations.—In addi-19 tion to the amounts authorized under section 814 of this 20 Act, there are authorized to be appropriated to the Sec-21 retary of Energy for operating expenses and capital equip-22 ment for research, development, demonstration, and initial 23 deployment assistance activities related to fossil energy re-24 sources technologies, under the Office of Fossil Energy,

1	including the clean coal technology demonstration pro-
2	gram:
3	(1) \$462,500,000 for fiscal year 2002;
4	(2) \$485,000,000 for fiscal year 2003;
5	(3) \$508,000,000 for fiscal year 2004;
6	(4) \$532,000,000 for fiscal year 2005; and
7	(5) \$558,000,000 for fiscal year 2006.
8	SEC. 1405. ENHANCED NUCLEAR ENERGY RESEARCH AND
9	DEVELOPMENT.
10	(a) Goals.—It is the sense of Congress that a bal-
11	anced energy research, development, and deployment pro-
12	gram to enhance renewable energy should have the fol-
13	lowing goals:
14	(1) The program should support research re-
15	lated to existing United States nuclear power reac-
16	tors to extend their lifetimes and increase their reli-
17	ability while optimizing their current operations for
18	greater efficiencies.
19	(2) The program should address advanced pro-
20	liferation-resistant reactor designs, proliferation-re-
21	sistant and high burn-up nuclear fuels, minimization
22	of generation of radioactive materials, improved nu-
23	clear waste management technologies, and improved
24	instrumentation science.

- 1 (3) The program should attract new students 2 and faculty to the nuclear sciences and nuclear engi-3 neering through a university-based fundamental research program for existing faculty and new junior 5 faculty, a program to re-license existing training re-6 actors at universities in conjunction with industry, and a program to complete the conversion of existing 7 8 training reactors with proliferation resistant fuels 9 that are low enriched and to adapt those reactors to 10 new investigative uses.
 - (4) The program should maintain a national capability and infrastructure to produce medical isotopes and ensure a well trained cadre of nuclear medicine specialists in partnership with industry.
 - (5) The program should ensure that our nation has adequate capability for power future satellite and space missions.
 - (6) The programs should investigate the fundamental and applied sciences associated with highand low-energy accelerators as a method to transmute nuclear waste, particularly wastes that may be difficult to dispose of by other methods.
 - (7) The program should maintain, where appropriate through a prioritization process, a balanced

12

13

14

15

16

17

18

19

20

21

22

23

1	research infrastructure so that future research pro-
2	grams can utilize these facilities.
3	(b) Authorization of Appropriations.—There
4	are authorized to be appropriated to the Secretary of En-
5	ergy for operating expenses and capital equipment for re-
6	search, development, demonstration, and initial deploy-
7	ment assistance activities related to nuclear energy re-
8	search and development:
9	(1) \$433,000,000 for fiscal year 2002;
10	(2) \$461,000,000 for fiscal year 2003;
11	(3) \$491,000,000 for fiscal year 2004;
12	(4) \$523,000,000 for fiscal year 2005; and
13	(5) \$557,000,000 for fiscal year 2006.
13 14	(5) \$557,000,000 for fiscal year 2006. SEC. 1406. ENHANCED PROGRAMS IN FUNDAMENTAL EN
14	SEC. 1406. ENHANCED PROGRAMS IN FUNDAMENTAL EN
14 15	SEC. 1406. ENHANCED PROGRAMS IN FUNDAMENTAL ENERGY SCIENCE.
14 15 16	SEC. 1406. ENHANCED PROGRAMS IN FUNDAMENTAL ENERGY SCIENCE. (a) FINDINGS.—The Congress finds the following:
14 15 16 17	SEC. 1406. ENHANCED PROGRAMS IN FUNDAMENTAL ENERGY SCIENCE. (a) FINDINGS.—The Congress finds the following: (1) The Office of Science within the Depart-
14 15 16 17	SEC. 1406. ENHANCED PROGRAMS IN FUNDAMENTAL ENGRETHER. (a) FINDINGS.—The Congress finds the following: (1) The Office of Science within the Department of Energy is the nation's single largest funding
114 115 116 117 118	SEC. 1406. ENHANCED PROGRAMS IN FUNDAMENTAL ENERGY SCIENCE. (a) FINDINGS.—The Congress finds the following: (1) The Office of Science within the Department of Energy is the nation's single largest funding source for the basic physical sciences. These intellections
14 15 16 17 18 19 20	ERGY SCIENCE. (a) FINDINGS.—The Congress finds the following: (1) The Office of Science within the Department of Energy is the nation's single largest funding source for the basic physical sciences. These intellectual disciplines, which include physics, chemistry,
14 15 16 17 18 19 20 21	ERGY SCIENCE. (a) FINDINGS.—The Congress finds the following: (1) The Office of Science within the Department of Energy is the nation's single largest funding source for the basic physical sciences. These intellectual disciplines, which include physics, chemistry, and materials science, are crucial to the nation's fundamental science.

- 1 (2) Despite the importance of the physical 2 sciences, the Office of Science budget has remained 3 stagnant over the past decade.
- 4 (3) The stagnation in funding for the physical 5 sciences through the Office of Science has been re-6 flected in a decline in United States contributions to 7 leading scientific journals, as the share of European 8 and Asian submissions to these journals since 1990 9 has increased from 50 to 75 percent while the 10 United States share has decreased to 25 percent.
- 11 (b) Goals.—It is the sense of Congress that the De-12 partment of Energy, through the Office of Science, 13 should—
 - (1) develop a robust portfolio of fundamental energy research, including chemical sciences, physics, materials sciences, biological and environmental sciences, geosciences, engineering sciences, plasma sciences, mathematics, and advanced scientific computing;
 - (2) maintain, upgrade and expand the scientific user facilities maintained by the Office of Science and insure that they are an integral part of the Department's mission for exploring the frontiers of fundamental energy sciences;

15

16

17

18

19

20

21

22

23

(3) maintain a leading-edge research capability

2	in the energy-related aspects of nanoscience and
3	nanotechnology, advanced scientific computing and
4	genome research; and
5	(4) ensure that its fundamental energy sciences
6	programs, where appropriate, help inform the ap-
7	plied research and development programs of the De-
8	partment.
9	(c) Authorization of Appropriations.—There
10	are authorized to be appropriated to the Secretary of En-
11	ergy for operating expenses and capital equipment for fun-
12	damental energy research and development in the Office
13	of Science—
14	(1) \$3,716,000,000 for fiscal year 2002;
15	(2) \$4,087,000,000 for fiscal year 2003;
16	(3) \$4,496,000,000 for fiscal year 2004;
17	(4) \$4,946,000,000 for fiscal year 2005; and
18	(5) \$5,440,000,000 for fiscal year 2006.
19	TITLE XV—MANAGEMENT OF
20	DOE SCIENCE AND TECH-
21	NOLOGY PROGRAMS
22	SEC. 1501. MERIT REVIEW.
23	Awards of funds authorized under title XIV shall be
24	made only after independent review of the scientific and

- 1 technical merit of the proposals therefor has been under-
- 2 taken by the Department of Energy.

3 SEC. 1502. COST SHARING.

- 4 (a) Research and Development.—For research
- 5 and development projects funded from appropriations au-
- 6 thorized under sections 1402 through 1405, the Secretary
- 7 of Energy shall require a commitment from non-Federal
- 8 sources of at least 20 percent of the cost of the project.
- 9 The Secretary may reduce or eliminate the non-Federal
- 10 requirement under this paragraph if the Secretary deter-
- 11 mines that the research and development is of a basic or
- 12 fundamental nature.
- 13 (b) Demonstration and Deployment.—For dem-
- 14 onstration and deployment activities funded from appro-
- 15 priations authorized under sections 1402 through 1405,
- 16 the Secretary of Energy shall require a commitment from
- 17 non-Federal sources of at least 50 percent of the costs
- 18 of the project directly and specifically related to any dem-
- 19 onstration, deployment, or commercial application. The
- 20 Secretary may reduce or eliminate the non-Federal re-
- 21 quirement under this paragraph if the Secretary deter-
- 22 mines that the reduction is necessary and appropriate con-
- 23 sidering the technological risks involved in the project and
- 24 is necessary to meet one or more goals of this title.

1	(c) CALCULATION OF AMOUNT.—In calculating the
2	amount of the non-Federal commitment under subsection
3	(a) or (b), the Secretary shall include cash, personnel,
4	services, equipment, and other resources.
5	SEC. 1503. IMPROVED COORDINATION AND MANAGEMENT
6	OF SCIENCE AND TECHNOLOGY.
7	(a) NATIONAL ENERGY RESEARCH AND DEVELOP-
8	MENT ADVISORY BOARDS.—
9	(1) Establishment.—The Secretary of En-
10	ergy shall establish an advisory board to oversee De-
11	partment of Energy research and development pro-
12	grams in each of the following areas:
13	(A) energy efficiency;
14	(B) renewable energy;
15	(C) fossil energy; and
16	(D) nuclear energy.
17	The Secretary may designate an existing advisory
18	board within the Department to fulfill the respon-
19	sibilities of an advisory board under this subsection,
20	or may enter into appropriate arrangements with the
21	National Academy of Sciences to establish such an
22	advisory board.
23	(2) Utilization of existing committees.—
24	The Secretary of Energy shall continue to use the
25	scientific program advisory committees chartered

- under the Federal Advisory Committee Act by the Office of Science to oversee research and development programs under that Office.
- 4 (3) Membership.—Each advisory board under 5 this subsection shall consist of experts drawn from 6 industry, academia, federal laboratories, or other re-7 search institutions.
 - (4) Meetings and purposes.—Each advisory board under this subsection shall meet at least semi-annually to review and advise on the progress made by the respective research, development, and deployment program. The advisory board shall also review the adequacy and relevance of the goals established for each program by Congress and the President, and may otherwise advise on promising future directions in research and development that should be considered by each program.
- 18 (b) Effective Coordination of Department 19 Programs.—Section 202(b) of the Department of Energy 20 Organization Act (42 U.S.C. 7132(b)) is amended to read 21 as follows:
- "(b)(1) There shall be in the Department an Under Secretary for Science and Technology, who shall be appointed by the President, by and with the advice and consent of the Senate. The Under Secretary shall be com-

9

10

11

12

13

14

15

16

1	pensated at the rate provided for at level III of the Execu-
2	tive Schedule under section 5314 of title 5, United States
3	Code.
4	"(2) The Under Secretary for Science and Tech-
5	nology shall be appointed from among persons who—
6	"(A) have extensive background in scientific or
7	engineering fields; and
8	"(B) are well qualified to manage the civilian
9	research and development programs of the Depart-
10	ment of Energy.
11	"(3) The Under Secretary for Science and Tech-
12	nology shall—
13	"(A) serve as the Science and Technology Advi-
14	sor to the Secretary;
15	"(B) monitor the Department's research and
16	development programs in order to advise the Sec-
17	retary with respect to any undesirable duplication or
18	gaps in such programs;
19	"(C) advise the Secretary with respect to the
20	well-being and management of the multipurpose lab-
21	oratories under the jurisdiction of the Department;
22	"(D) advise the Secretary with respect to edu-
23	cation and training activities required for effective
24	short- and long-term basic and applied research ac-
25	tivities of the Department;

1	"(E) advise the Secretary with respect to grants
2	and other forms of financial assistance required for
3	effective short- and long-term basic and applied re-
4	search activities of the Department; and
5	"(F) exercise authority and responsibility over
6	the performance of functions under section
7	203(a)(2), as well as other civilian research and de-
8	velopment authorities assigned to the Secretary by
9	statute.".
10	(c) Transfer of Responsibilities From Office
11	OF SCIENCE.—Section 209 of the Department of Energy
12	Organization Act (41 U.S.C. 7139) is amended by—
13	(1) striking "(a)"; and
14	(2) striking subsection (b).
15	(d) Technical and Conforming Amendments.—
16	(1) Section 202 of the Department of Energy
17	Organization Act (42 U.S.C. 7132) is further
18	amended by adding the following at the end:
19	"(c) There shall be in the Department an Under Sec-
20	retary, who shall be appointed by the President, by and
21	with the advice and consent of the Senate, and who shall
22	perform such functions and duties as the Secretary shall
23	prescribe, consistent with this section. The Under Sec-
24	retary shall be compensated at the rate provided for level

1	III of the Executive Schedule under section 5314 of title
2	5, United States Code.
3	"(d) There shall be in the Department a General
4	Counsel, who shall be appointed by the President, by and
5	with the advice and consent of the Senate. The General
6	Counsel shall be compensated at the rate provided for level
7	IV of the Executive Schedule under section 5315 of title
8	5, United States Code.".
9	(2) Section 5314 of title 5, United States Code
10	is amended by striking "Under Secretaries of En-
11	ergy (2)" and inserting "Under Secretaries of En-
12	ergy (3)".
13	TITLE XVI—PERSONNEL AND
14	TRAINING
15	SEC. 1601. WORKFORCE TRENDS AND TRAINEESHIP
16	GRANTS.
17	(a) Workforce Trends.—
18	(1) Monitoring.—The Secretary of Energy,
19	acting through the Administrator of the Energy In-
20	formation Administration, in consultation with the
21	Secretary of Labor, shall monitor trends in the
22	workforce of skilled technical personnel supporting
23	energy technology industries, including renewable
21	Secretary of Labor, shall monitor tree

mercializing devices to increase energy-efficiency, the

- oil and gas industry, nuclear power industry, the coal industry, and other industrial sectors as the Secretary of Energy may deem appropriate.
- 4 (2) Annual Reports.—The Administrator of 5 the Energy Information Administration shall include 6 statistics on energy industry workforce trends in the 7 annual reports of the Energy Information Adminis-8 tration.
- 9 (3) SPECIAL REPORTS.—The Secretary shall re-10 port to the appropriate committees of Congress 11 whenever the Secretary determines that significant 12 shortfalls of technical personnel in one or more en-13 ergy industry segments are forecast or have oc-14 curred.
- 15 (b) Traineeship Grants for Technically16 Skilled Personnel.—
- 17 (1) Grant programs.—The Secretary shall es-18 tablish grant programs in the appropriate offices of 19 the Department of Energy to enhance training of 20 technically skilled personnel for which a shortfall is 21 determined under subsection (a).
 - (2) ELIGIBLE INSTITUTIONS.—As determined by the Secretary of Energy to be appropriate to the particular workforce shortfall, the Secretary shall make grants under paragraph (1) to—

23

24

1	(A) an institution of higher education
2	(within the meaning given that term in section
3	1201(a) of the Higher Education Act of 1965
4	(20 U.S.C. 1141(a));
5	(B) a postsecondary educational institution
6	providing vocational and technical education
7	(within the meaning given those terms in sec-
8	tion 3 of the Carl D. Perkins Vocational and
9	Technical Education Act of 1998 (20 U.S.C.
10	2302)); or
11	(C) appropriate agencies of State, local, or
12	tribal governments.
13	SEC. 1602. TRAINING GUIDELINES FOR ELECTRIC ENERGY
	SEC. 1602. TRAINING GUIDELINES FOR ELECTRIC ENERGY INDUSTRY PERSONNEL.
14	
14 15	INDUSTRY PERSONNEL.
141516	industry personnel. (a) Model Guidelines.—The Secretary of Energy shall, in cooperation with electric utilities and local dis-
14 15 16 17	industry personnel. (a) Model Guidelines.—The Secretary of Energy shall, in cooperation with electric utilities and local dis-
14 15 16 17 18	industry personnel. (a) Model Guidelines.—The Secretary of Energy shall, in cooperation with electric utilities and local distribution companies and recognized representatives of em-
14 15 16 17 18	INDUSTRY PERSONNEL. (a) Model Guidelines.—The Secretary of Energy shall, in cooperation with electric utilities and local distribution companies and recognized representatives of employees of those entities, develop model employee training
14 15 16 17 18 19 20	INDUSTRY PERSONNEL. (a) Model Guidelines.—The Secretary of Energy shall, in cooperation with electric utilities and local distribution companies and recognized representatives of employees of those entities, develop model employee training guidelines to support electric supply system reliability and
14 15 16 17 18 19 20 21	industry personnel. (a) Model Guidelines.—The Secretary of Energy shall, in cooperation with electric utilities and local distribution companies and recognized representatives of employees of those entities, develop model employee training guidelines to support electric supply system reliability and safety.
	INDUSTRY PERSONNEL. (a) Model Guidelines.—The Secretary of Energy shall, in cooperation with electric utilities and local distribution companies and recognized representatives of employees of those entities, develop model employee training guidelines to support electric supply system reliability and safety. (b) Content of Guidelines.—The guidelines

1	set forth by the Utility Industry Group recognized
2	by the National Skill Standards Board; and

(2) consolidation of existing guidelines on the construction, operation, maintenance, and inspection of electric supply generation, transmission and distribution facilities such as those established by the National Electric Safety Code and other industry consensus standards.

 \bigcirc